THE DR WHO ANNUAL

As played by
PATRICK TROUGHTON

FASCINATING STORIES OF THE UNKNOWN BASED ON THE FAMOUS TELEVISION SERIES

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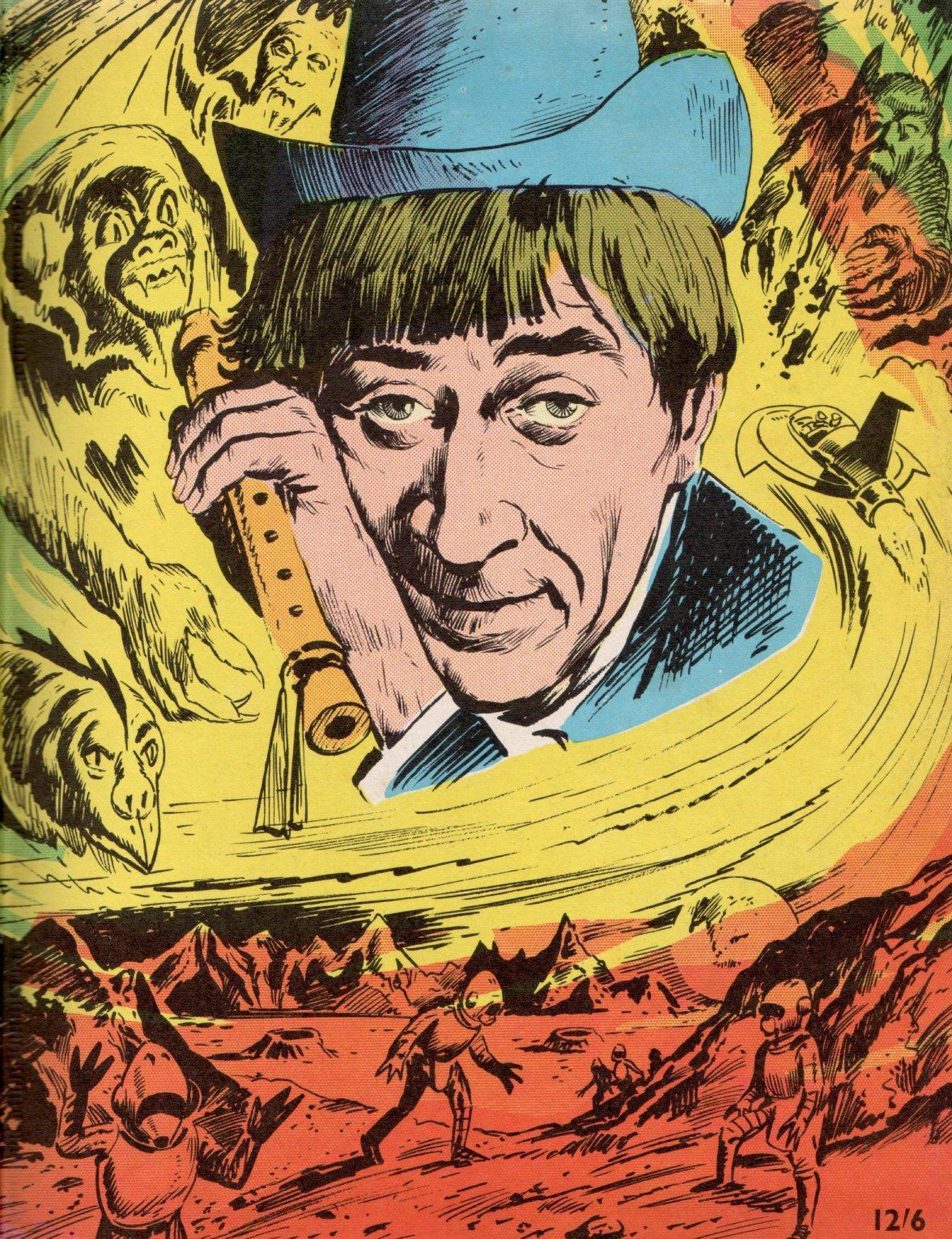
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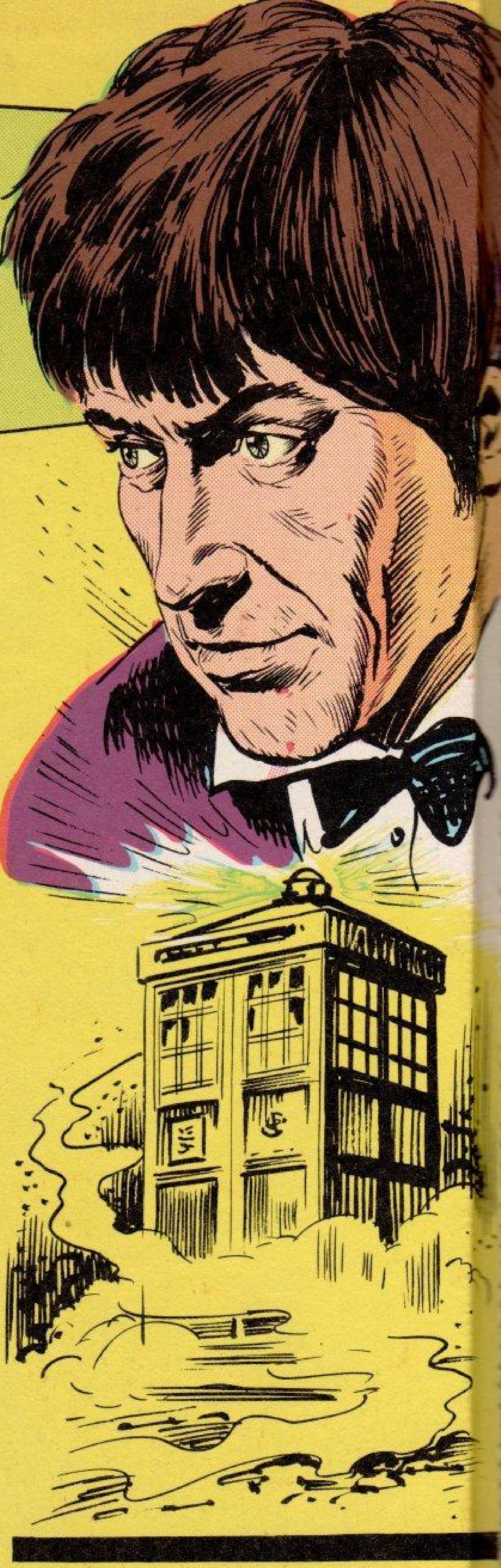

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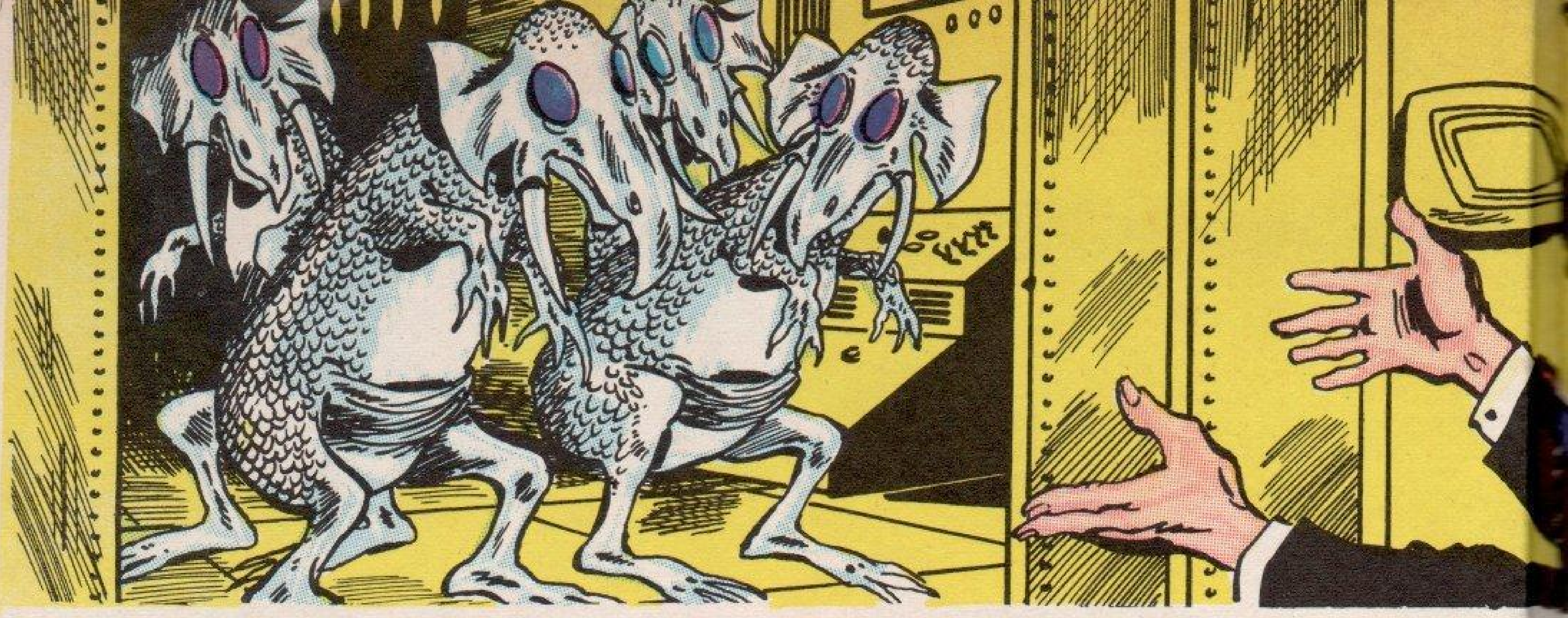
THE DR.WHO ANNUAL



LORDS of the GALAXY

MANY a time in all his wanderings through the labyrinths of Space and Time, Dr. Who had often been accused by Jamie and Victoria, and the other companions he had gathered round him, of appalling carelessness in his navigation of his marvellous Space-Time ship, the *Tardis*. Try as he would he had never been able to plot a course through the worlds and the dimensions to arrive at a desired place at a desired time. The *Tardis* had landed the three of them in many strange places at odd times, often into acute danger, but never before into such terrifying horrors as they saw when they emerged from the door on to the ravaged surface of a world with two suns, closer to the hub of the Milky Way than the Solar System.

"This, children," said the Doctor heavily, "is where the action is. As one might say, it's all happening here. We've landed in a very hot spot this time. By all the signs we have come out into the No Mans' Land of a great interstellar war and the sooner we get back inside and make ourselves scarce the better it will be. Inside again, children!"

But he was too late. A narrow violet beam had lanced down over them, *Tardis* and all, and they were lifted bodily through the air. The sky was filled with criss-crossing rays of various colours. They could see space-ships too, but what ships they were! Vast globes spitting fire and mile-long projectiles spewing forth fireballs and coloured rays which licked round other ships and disintegrated them into atomic dust. The planet over which they were being carried was a smoking, riven desert. No features could be seen, just flat desert. Huge furrows in the surface denoted where disintegration beams had ploughed through, dissolving soil and rock alike.

The *Tardis* was still with them but all three of them were held rigid in the grip of the force in the beam. The ray shortened and the broad under-belly of a gigantic space-ship seemed to swoop down on them. A square port opened and they found themselves inside. Still they were held immovable.

"Well, well," observed Dr. Who philosophically. "Here we are and where are we? We've dropped into something hot this time."

"World War Three, do you think, Doctor?" asked Victoria, trembling.

"Interstellar War Ninety-Nine," grinned Dr. Who, "if appearances are anything to go by. But still it's familiar enough. This is a space-ship and we are now in a very large air-lock. We have been captured by one side in a tremendous war between star systems, or perhaps even a galactic war."

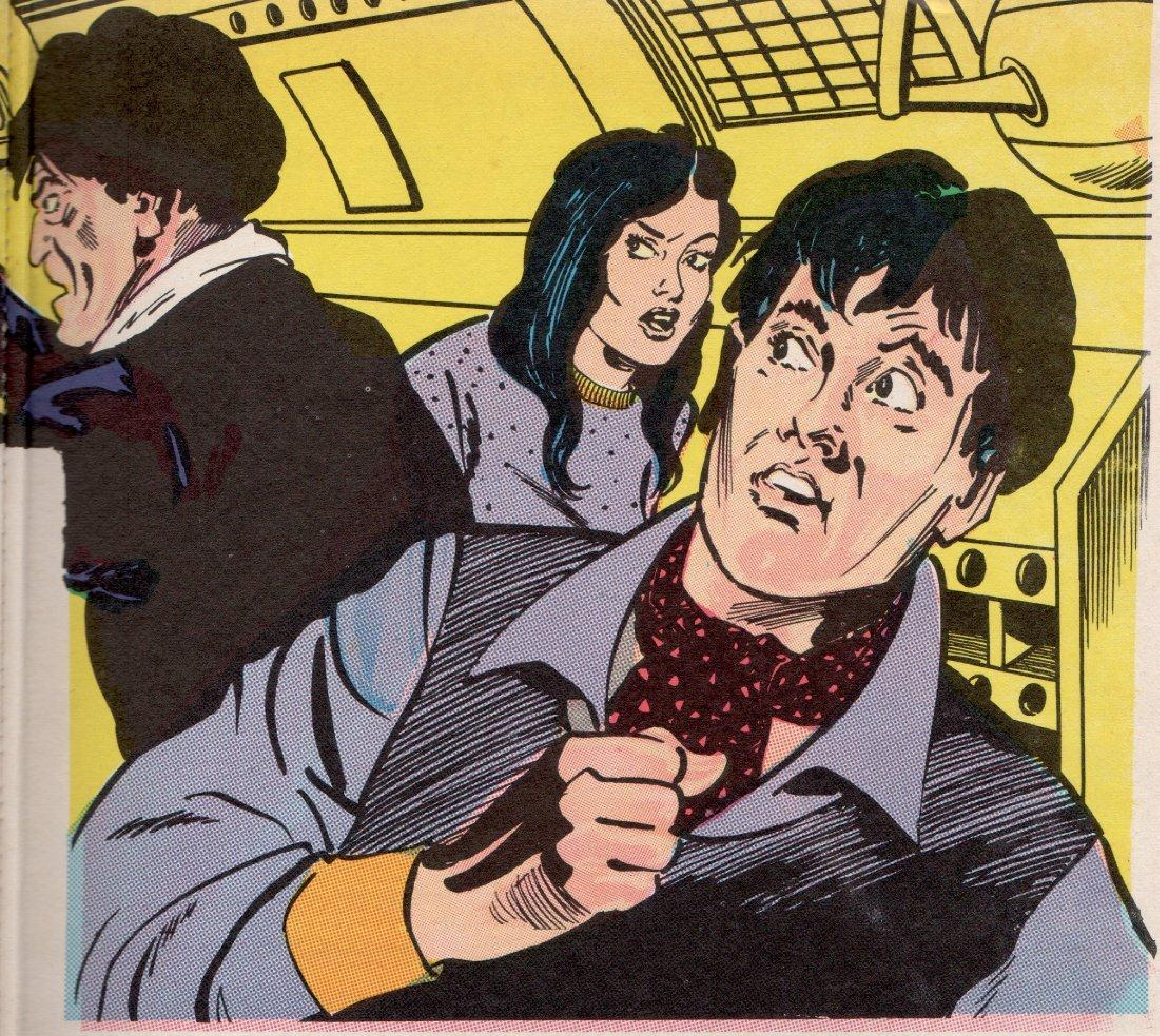
Jamie whistled through his chattering teeth. "You take it calmly, Doctor," he said witheringly. "I'm scared stiff, I can tell you. So's Victoria."

"What is there to be frightened of?" the Doctor demanded stoutly. "Look, the inner door is opening and *air* is coming in. Wherever we are at least our jailors breathe the same air that we do. I can move now, can you? That force is no longer in operation. Whoever these creatures are——"

A shrill scream from Victoria was the first thing that greeted the scene when the inner air-lock door slid back and they looked out and saw their captors. There were four of them and although there was a faint human semblance it was vague and even the tough Dr. Who felt his flesh crawl when he saw *what* had captured them.

They stood on two legs and they had two short upper limbs. They had long heads with tusked snouts and two eyes and a mouth. After that, any likeness to humanity ceased. They were covered with silvery scales, there was a most revolting musky odour about them and their huge eyes were lidless and the violet pupils stared in at the four beings they had captured.

The Doctor wiped his forehead and gripped Jamie's arm. The lad was shivering from head to foot. "Chin up, Jamie, and you, Victoria," he muttered. "As representatives of mankind we must put a good face on this. These things look reptilian; they are Saurians, like the ancient Earth dinosaurs. They are obviously extremely intelligent, as witness their ship." He stepped forward suddenly with outstretched arms.



"We are from the Planet Earth ——" he began and even he was surprised at the effect his simple words had on them. All four of the creatures leaped back with a rattling of dry scales and four taloned paws drew strange-looking hand-weapons from pouches round their middles.

"Halt at once! Stay where you are!" was the command rapped at them from the gaping, tusked jaws of one of them. The four conferred together and then they advanced in a body. Victoria screamed as the scaly paws ran over her and Jamie struggled fiercely. Only the Doctor stood firm with an air of dignity he was very far from feeling.

"We will take you four spies to the Supreme Lizard," said one of the four. "Already the news has been flashed round the fleet. Any attempt to escape made by any one of you and you will all be frozen again."

Dr. Who thought that statement strange. Why frozen and not slain? The strange weapons wielded by these enormous lizards *looked* deadly enough. Why was there no word of killing? For a race engaged in a space-war of such evident frightfulness as they had seen, this looked somewhat odd.

"The Supreme Lizard!" he said loftily. "And who, pray, is this creature? We have small lizards on Earth——".

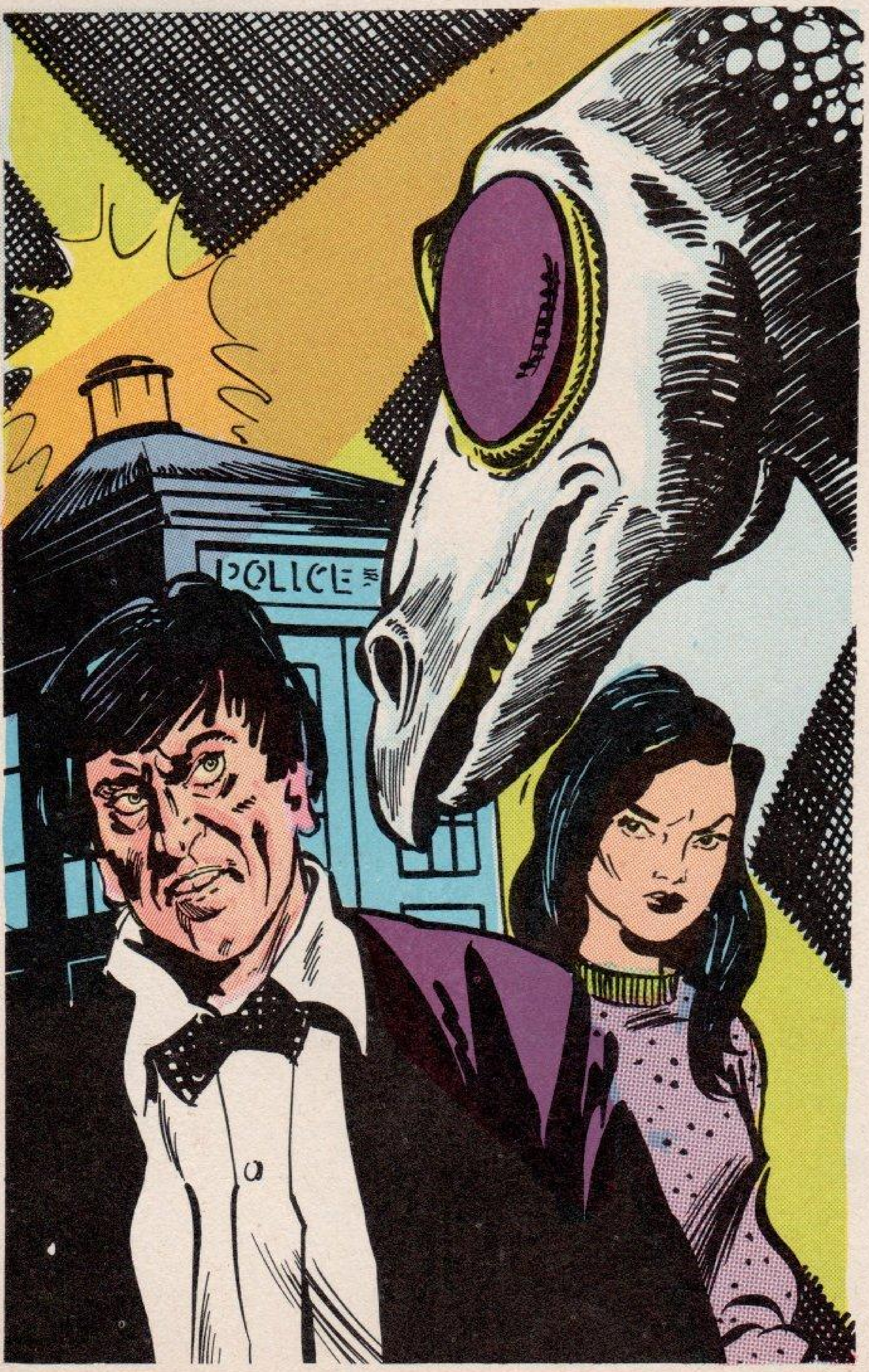
"Again that dread word," hissed one of them. "Come, we must haste, the Lord Haxtl must see them at once. This is out of our hands. Where is he now?"

"He is in the Hatchery," was the reply. "The next batch are to break the shell today. They are all cosmic-ray technicians this time. That last battle against the Orion Fleet obliterated many of that caste."

Dr. Who felt he must be dreaming as they were dragged along the steel corridors of the huge ship. They passed many creatures like the four and all were busy at mysterious tasks about the great ship. That it was a fighting space-ship was obvious enough, but presently the spare steel walls, floors, and ceilings gave way to softer-coloured surroundings and the Doctor knew they were approaching the quarters of the one named as the

Supreme Lizard. Cosmic rays indeed! That was something new. If these creatures commanded a method of harnessing these mysterious emanations to warlike purposes, then surely they must be Lords of the Galaxy, with none able to withstand them. The source of cosmic rays on Earth, coming from every part of the galaxy, had never been determined. Was he now in prospect of making the discovery . . . too late?

The Lord Haxtl, Supreme Lizard, when they saw him, was a breathtaker. The four guards were big enough, about eight feet in height, but this being, obviously the admiral, captain, or commander of this enormous fighting ship, overtopped his four underlings by at least two feet. He was slithering across his throne-room from a side door, through which Dr. Who caught a glimpse of hundreds of rows of large blue eggs in racks and with Saurians attending them.



"What is the meaning of this intrusion?" the creature demanded haughtily. "Am I to be bothered by giving audience to every insignificant animal we take in our triumphant conquest of the Galaxy?" His words stopped and his large eyes devoured the three humans and the *Tardis*. He hissed a command and four spouts in the four upper corners of the great room shot out beams of energy and once again the three found themselves held rigid in the force-field. "This is getting monotonous, Doctor," growled Jamie, and Victoria looked miserably and longingly at the others, separated from them only by a foot or so but for all that she could do to bridge the distance, it might have been millions of miles.

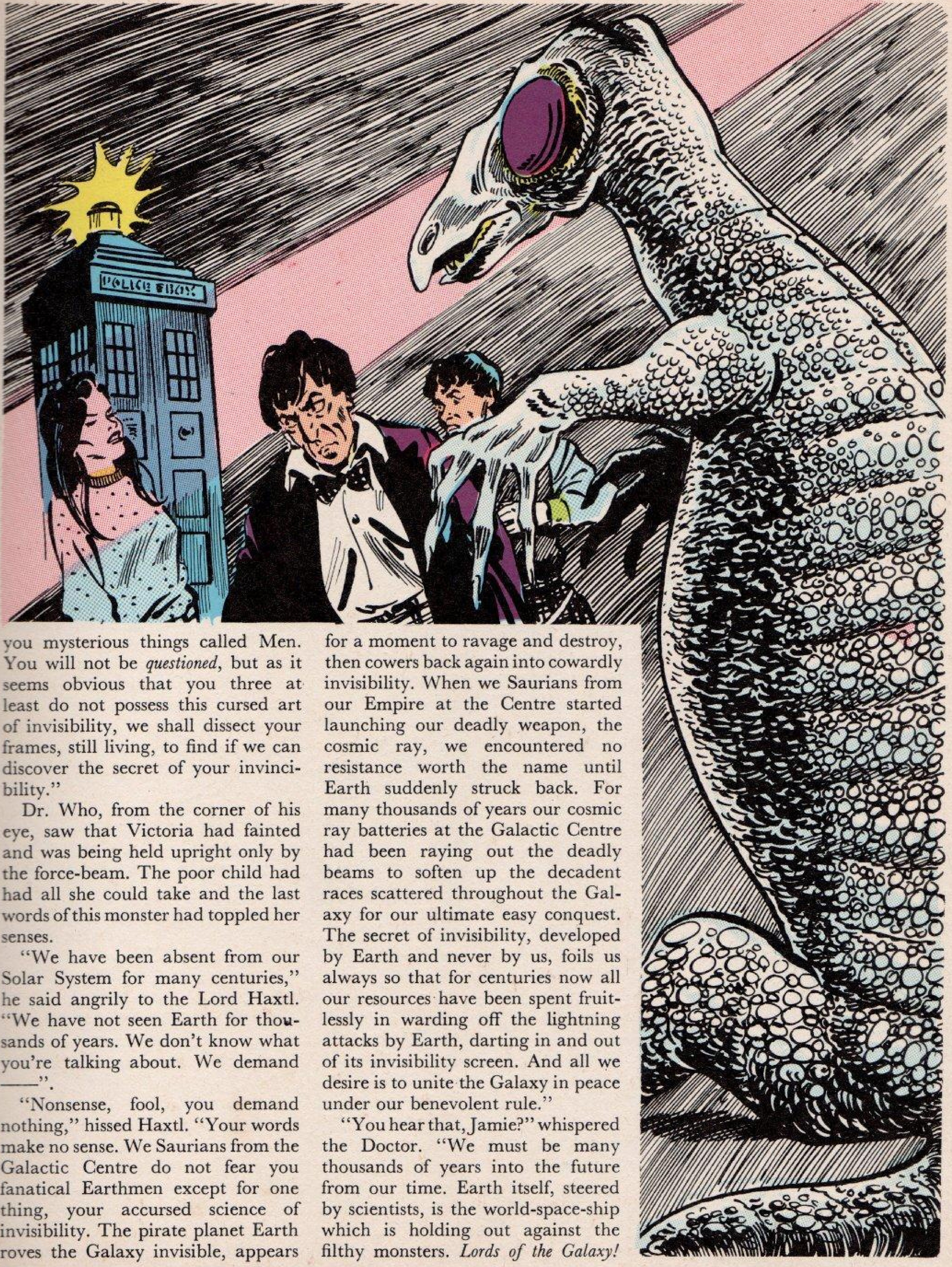
"These are *Earth*-creatures," hissed Lord Haxtl. "They are specimens of the legendary race called Men. Why was I not informed at once, imbeciles? Am I to be served always by Saurians with the intellects of the newly hatched? Where did you capture these prizes?"

"Highness," hissed one of the four, "they appeared on the surface of the planet we have just destroyed, they and their robot. We took them aboard and brought them to Your Supremacy at once. Lord, they *are* from *Earth*!"

"Fools! Idiots!" hissed Haxtl. He lurched towards the prisoners and his great liquid eyes peered into the eyes of Dr. Who. "Doubtless your frightful weapons of destruction are in your robot, eh?"

"We have no weapons," said the Doctor with dignity. "We are, indeed, as we told your soldiers, from the planet Earth. We are——".

"You are spies!" hissed the Supreme Lizard. "And you *will* be specimens in my laboratory. In all the long years in which the war has been waged throughout the Galaxy, never before have we Saurians ever been able to take an Earth prisoner. You Earthmen, like your accursed planet itself, seem to have the power of invisibility, and invincibility. When your three bodies have yielded up their secrets to my surgeons and psychiatrists, we will know all about



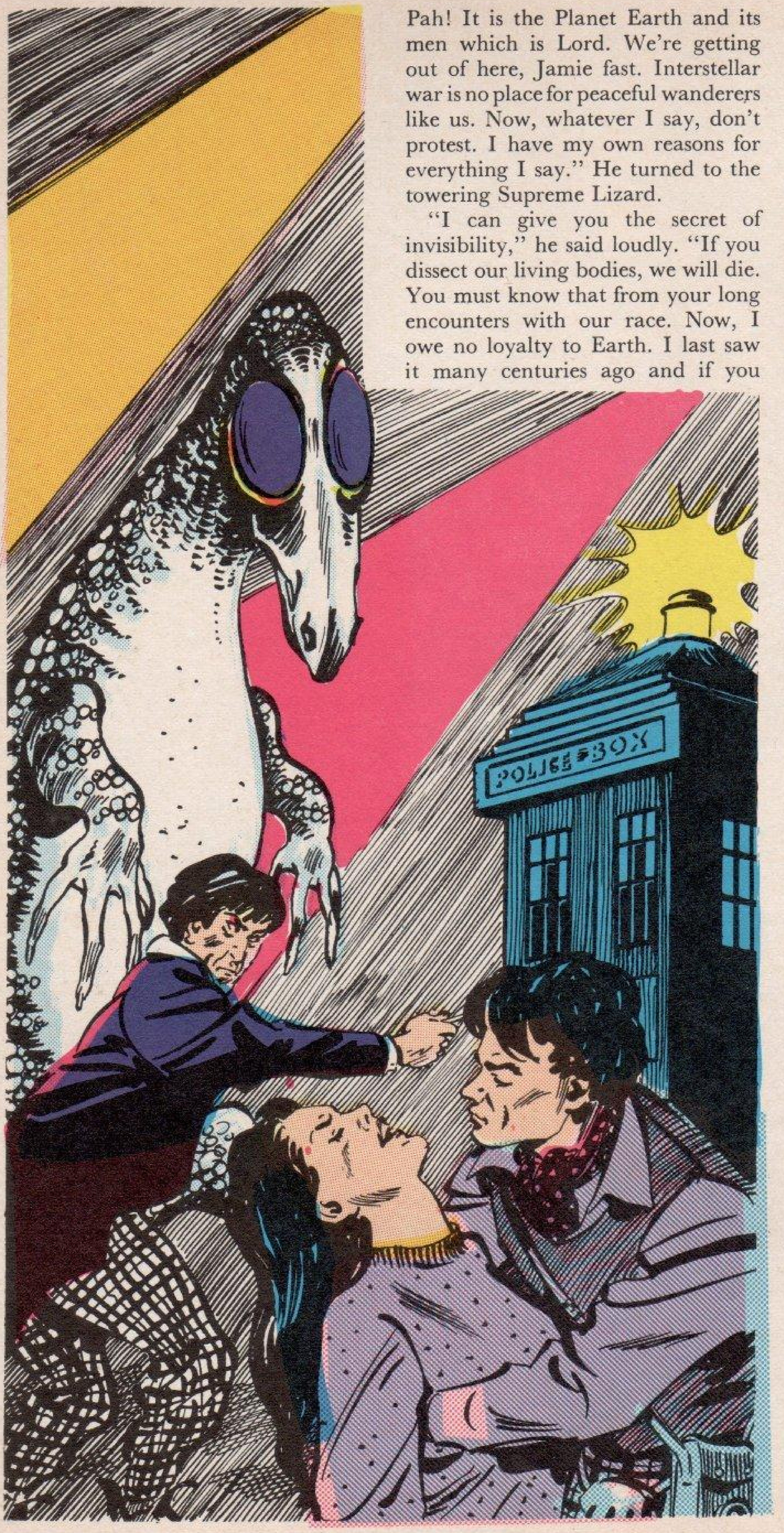
you mysterious things called Men. You will not be *questioned*, but as it seems obvious that you three at least do not possess this cursed art of invisibility, we shall dissect your frames, still living, to find if we can discover the secret of your invincibility."

Dr. Who, from the corner of his eye, saw that Victoria had fainted and was being held upright only by the force-beam. The poor child had had all she could take and the last words of this monster had toppled her senses.

"We have been absent from our Solar System for many centuries," he said angrily to the Lord Haxtl. "We have not seen Earth for thousands of years. We don't know what you're talking about. We demand ——".

"Nonsense, fool, you demand nothing," hissed Haxtl. "Your words make no sense. We Saurians from the Galactic Centre do not fear you fanatical Earthmen except for one thing, your accursed science of invisibility. The pirate planet Earth roves the Galaxy invisible, appears for a moment to ravage and destroy, then cowers back again into cowardly invisibility. When we Saurians from our Empire at the Centre started launching our deadly weapon, the cosmic ray, we encountered no resistance worth the name until Earth suddenly struck back. For many thousands of years our cosmic ray batteries at the Galactic Centre had been raying out the deadly beams to soften up the decadent races scattered throughout the Galaxy for our ultimate easy conquest. The secret of invisibility, developed by Earth and never by us, foils us always so that for centuries now all our resources have been spent fruitlessly in warding off the lightning attacks by Earth, darting in and out of its invisibility screen. And all we desire is to unite the Galaxy in peace under our benevolent rule."

"You hear that, Jamie?" whispered the Doctor. "We must be many thousands of years into the future from our time. Earth itself, steered by scientists, is the world-space-ship which is holding out against the filthy monsters. *Lords of the Galaxy!*



Pah! It is the Planet Earth and its men which is Lord. We're getting out of here, Jamie fast. Interstellar war is no place for peaceful wanderers like us. Now, whatever I say, don't protest. I have my own reasons for everything I say." He turned to the towering Supreme Lizard.

"I can give you the secret of invisibility," he said loudly. "If you dissect our living bodies, we will die. You must know that from your long encounters with our race. Now, I owe no loyalty to Earth. I last saw it many centuries ago and if you peace-loving Saurians are being prevented from taking over the Galaxy only by these cowardly Earthmen, I will help you."

"Doctor, Doctor," bawled Jamie. "You can't do it! You dirty traitor, you can't let these slimy slugs——".

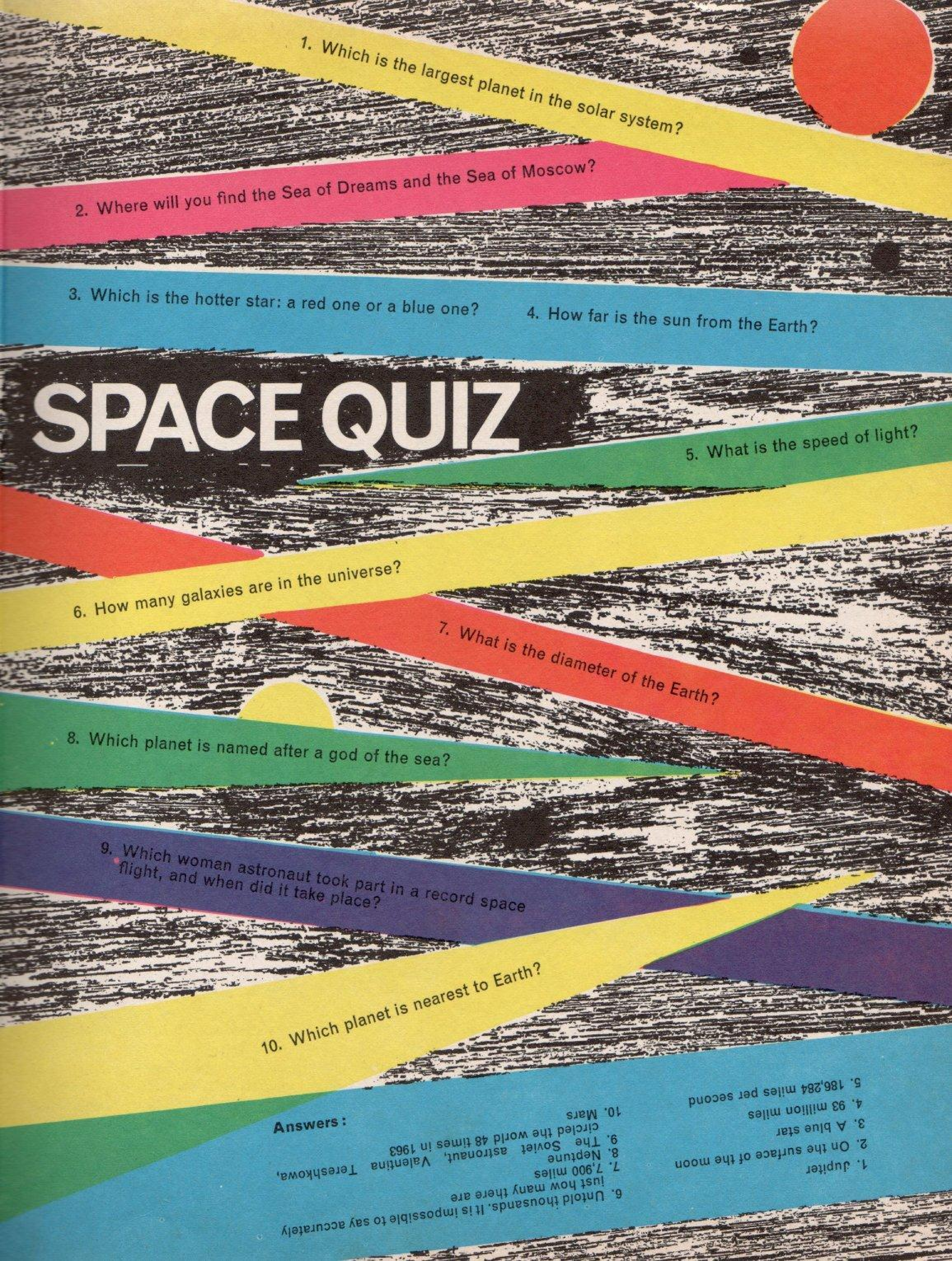
But Dr. Who did not heed him. He felt the force-beam release them and he took a step forward. The Lord Haxtl stared at him with eager eyes. One half of his strange reptilian nature scorned the Doctor's words but the other half longed to find out the secret which would make his race truly the Lords of the Galaxy. "My robot holds the secret," said the Doctor loudly. "You must allow we three Earthmen to operate our robot and it will give to you the great secret you want so much."

A struggle went on in the great reptile's mind, then the Doctor saw Jamie break free and clutch the fainting Victoria. All three moved resolutely towards the *Tardis* and with a steady hand he inserted his electronic key. They would get away with this only by forthright human audacity. The door opened. Trying not to hurry he led the way inside, feeling all those huge glittering reptilian eyes on them. The door closed and he whirled into furious action, "We'll give'em 'secret of invisibility', children," he howled. "Dissect us alive, would they, those vast earthworms? Get busy."

His fingers flew over the controls and the sound of the marvellous and mysterious engines rose above the limit of audibility. In the vision-plates the throne-room of the Lord Haxtl, Supreme Lizard and would-be conqueror of the Milky Way, disappeared and the grey nothingness of Non-Space was outside.

"But what about Earth, Doctor?" yelled Jamie above the whine. "It's like leaving Earth at the mercy of those filthy slugs out there."

"You must be deaf, Jamie," grinned the Doctor. "It is Earth that is Lord of the Galaxy, not our intelligent lizards out there. I don't think we need to worry about Earth and its people up in that tremendous future. We can safely assume that they can look after themselves very well indeed."



SPACE QUIZ

1. Which is the largest planet in the solar system?

2. Where will you find the Sea of Dreams and the Sea of Moscow?

3. Which is the hotter star: a red one or a blue one?

4. How far is the sun from the Earth?

5. What is the speed of light?

6. How many galaxies are in the universe?

7. What is the diameter of the Earth?

8. Which planet is named after a god of the sea?

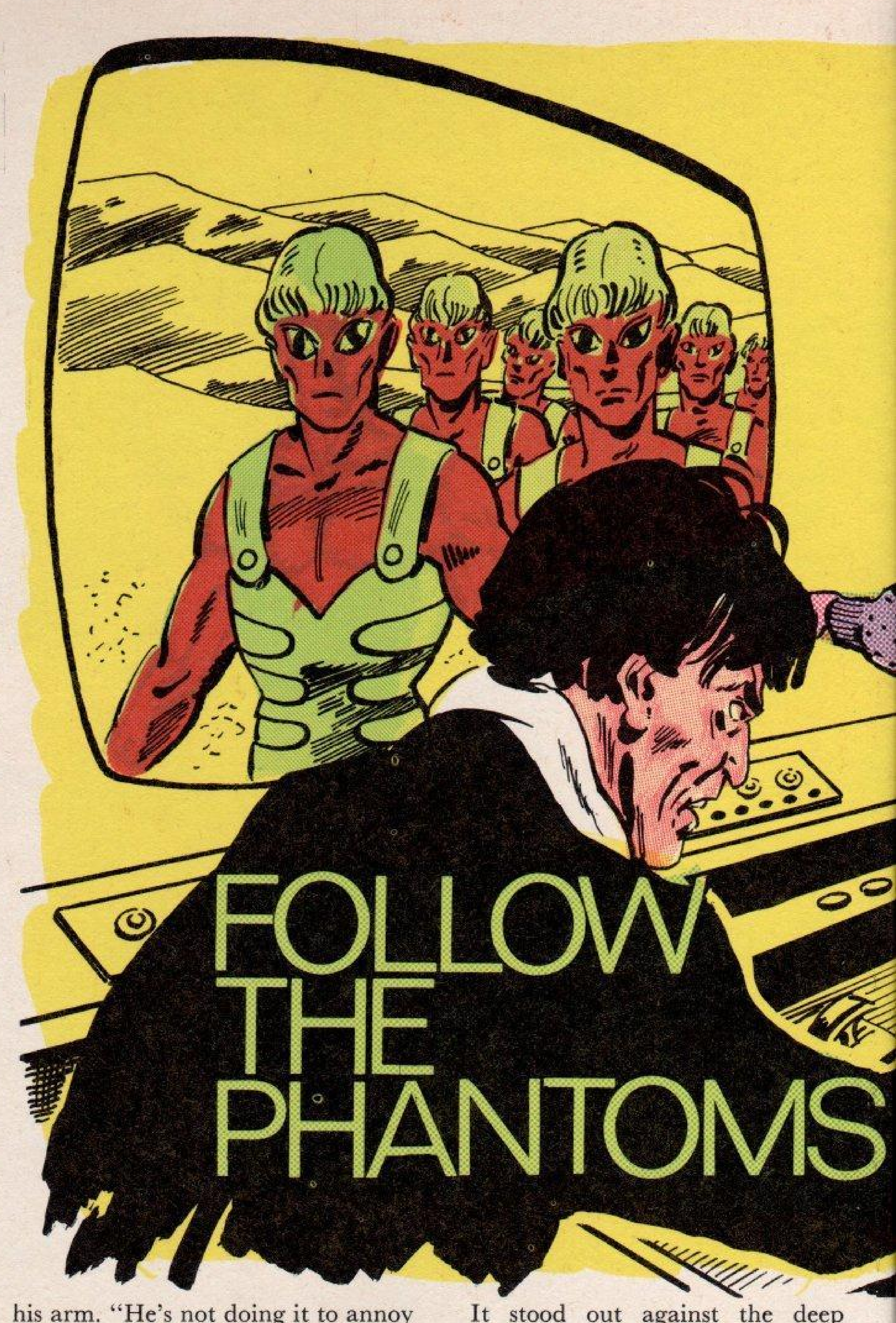
9. Which woman astronaut took part in a record space flight, and when did it take place?

10. Which planet is nearest to Earth?

Answers:

1. Jupiter
2. On the surface of the moon
3. A blue star
4. 93 million miles
5. 186,284 miles per second
6. Untold thousands. It is impossible to say accurately just how many there are
7. 7,900 miles
8. Neptune
9. The Soviet astronaut, Valentina Tereshkowa, circled the world 48 times in 1963
10. Mars

FOLLOW THE PHANTOMS



THE people parading by outside *Tardis* were obviously not human. Humanoid, yes, and in a way remarkably similar to human beings. But they were huge and heavily muscled and with the finely cut features of the ancient Greeks. Their eyes had a distinctly Asiatic slant and were much larger than earthly eyes.

"I say, what a handsome bunch!" commented Victoria, edging closer to the vision screen. "They look like a lot of film-stars . . . And yet——". She broke off uncertainly. . . . "There's something—a bit unreal. . . . ."

Jamie, her young friend and travelling companion, nodded agreement. "I know what you mean. They seem to be marching hard—and yet they don't seem to be getting anywhere. . . . Besides, where can they be heading for? Is this some desert we've landed in, Doctor?"

Dr. Who did not reply at once. He was bent over the control-board of his amazing Time and Space vehicle which, from the outside, resembled a police-box.

"Something wrong?" asked Victoria, her attention drawn momentarily from the vision screen.

The scientist straightened up and ran a hand thoughtfully through his short brown hair. "Hm! . . . This is most puzzling!" he mused.

Jamie frowned impatiently. "What is?" he demanded. "Is it that detector of yours? Is it on the blink again!"

Dr. Who turned on him with a look of distaste. "My boy, I have told you before how much I disapprove of those uncouth expressions you brought from Earth. . . . I presume that by 'on the blink' you are implying that my detector is not functioning? Correct?"

"Yes. . . . Well, is it or isn't it?" persisted Jamie.

But the only answer he got was a few light-hearted trills on the music-pipe which the scientist had picked up from his work-desk.

Jamie went red in the face and turned quickly back to watch the marching column of men. "Silly old——" he began to mutter under his breath.

Victoria came close and squeezed his arm. "He's not doing it to annoy you, Jamie. . . . Not really! It helps him to concentrate when he plays his pipe."

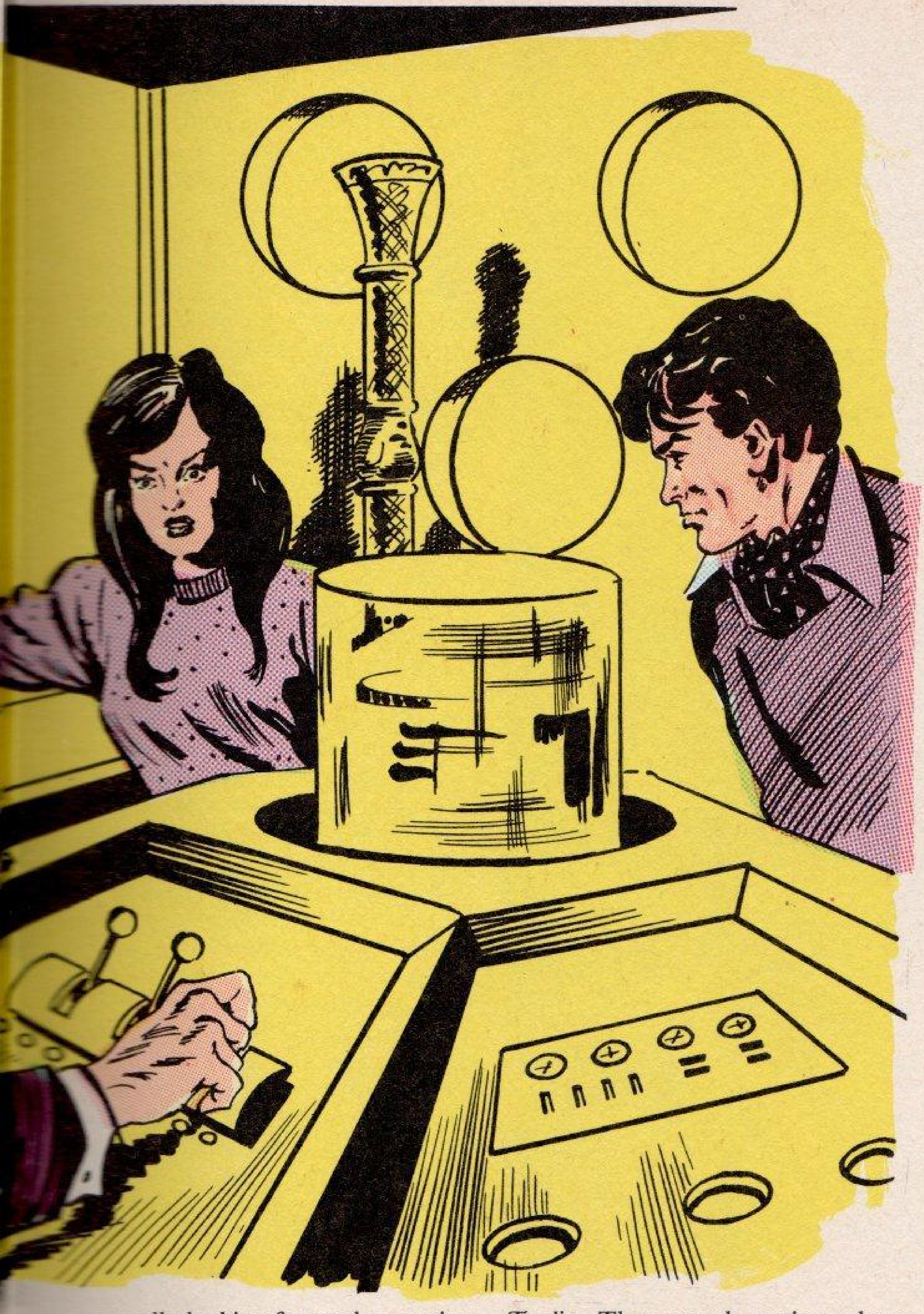
Jamie looked sulky. "He could answer my question, couldn't he? That detector device is his pet invention, and it is supposed to tell us, without leaving *Tardis*, what kind of world we've landed in, and what the natives are like."

Victoria was staring at the screen again. "Look!" she blurted. "Where did that cloud come from?"

It stood out against the deep purple sky just like any other cloud, only it lay close to the ground and it stretched away from their craft like a great, white wall.

The music behind them stopped. "A cloud!" rapped Dr. Who. He sprang to the side of his young companions and stared at the glowing screen. "But that's impossible in this atmosphere. It must be a mirage."

"Does that mean we shan't be able to go outside in this atmosphere?" asked Victoria, a trifle anxiously. "I



was really looking forward to getting outside and stretching my legs a bit."

Dr. Who stuffed his pipe into his pocket and reached for his shapeless tall hat. "Of course we can go out, my child. . . . The instruments show that it's quite safe to explore this planet—whatever its name is."

Victoria clapped her hands excitedly. "I shall call it Cloud Seven—because that's my lucky number," she laughed.

Dr. Who led the way outside *Tardis*. They stood staring about them.

"Well, your Cloud Seven doesn't seem to offer much in the way of variety of scenery!" commented Jamie.

It was true enough. The spacecraft had landed on the edge of a great plain. It was composed of gently undulating hills that resembled dunes more than anything else. The landscape gave more the appearance of a gently rolling sea.

The cloud was still there. It lay some distance away, and seemed to be directly in the path of the marching beings.

"Doctor! Look! I'm sure the cloud is growing!" gasped Victoria.

"Amazing!" murmured the scientist. "We must get a closer look to see if there are any fissures or cracks in the desert floor."

"You mean the cloud might be formed by vapours rising from beneath the planet's crust, eh?" said Jamie.

"Exactly," came the answer. "Come and help me to get the Floater out of the *Tardis* store-room. I intend to sail into the cloud and collect a sample for analysis."

The Floater was another of the Doctor's inventions. It was a portable craft designed for exploring. Folded into a small leather valise, it could be inflated at the touch of a button and became an airborne craft, propelled by jets.

When the Floater was inflated, they climbed aboard.

Dr. Who took the controls, and they rose smoothly into the air and sped towards the cloud. Below, the dry sands were whipped up by the pulsating jets.

"I've got my camera!" said Jamie to Victoria as they peered around through the transparent canopy. "I want pictures of those marching soldiers—or whatever they are."

Perhaps he was overheard by Dr. Who, for the scientist brought the Floater down low as they drew abreast of the marching column.

Now they could see that the strangers were giants—something like eight feet tall, Jamie figured. Their stride was enormous. They were magnificent, towering specimens.

"Male, probably!" said the Doctor aloud. "But I can't be certain."

Each was clad in a sort of tunic and harness which left most of his chest bare, and all of them supported objects suspiciously like weapons across their massive shoulders. Their dark brown skins glistened with perspiration. They marched steadily ahead with their eyes fixed on an unseen objective far in the distance.

"Why don't they see us?" Jamie asked.

"Perhaps they can't!" suggested Victoria.

Dr. Who touched a switch and the Floater began to descend to the plain ahead of the column.

"Yes, it's possible they are blind," he agreed. "In any case I intend to try and communicate with them."

When the Floater touched down, he spoke over his shoulder: "I suggest that you both stay here until I have established some sort of communication," he said.

But as he climbed to the ground, Jamie came scrambling after him. "You're not leaving me behind! I want some pictures!" he said.

They stood in the path of the marching column. Dr. Who raised his hat and cried out: "Greetings! We are travellers. . . . "We come in peace!"

But the staring eyes of the giant beings did not focus. They seemed to stare right through the Doctor and Jamie.

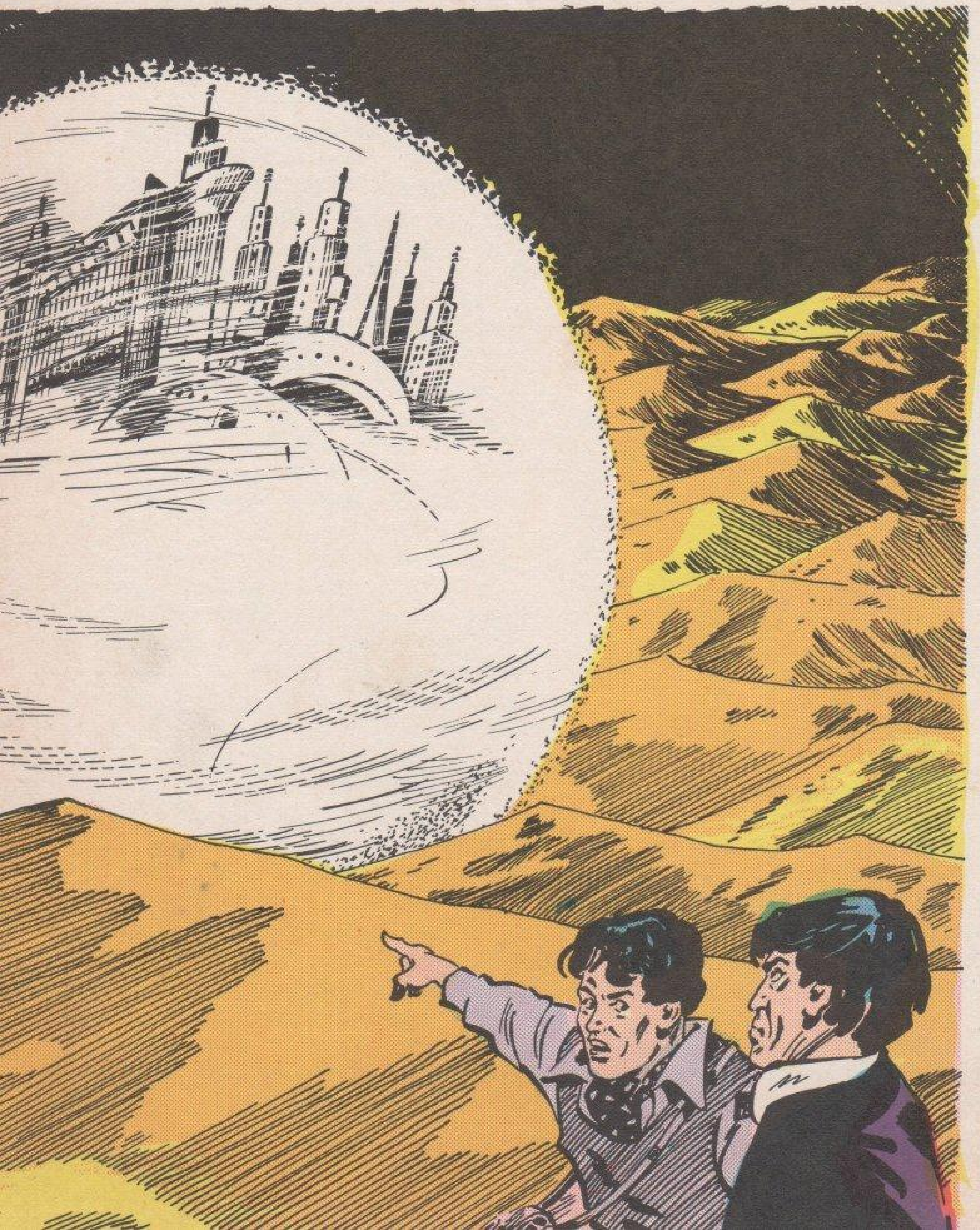
"Great guns! They'll march straight over us if we stay here!" exclaimed the boy. "Quick, Doctor!"

But the scientist seemed to be rooted by curiosity. He did not budge. Jamie dived from under the marching feet. . . .

He scrambled to his feet and stared in horror at a sight which made him doubt the evidence of his own eyes. . . .

For Dr. Who still stood there—while the marchers passed *through* him like an army of ghosts!

"They *must* be ghosts!" gasped Jamie.



Then he remembered his camera. He could see the scientist was quite unharmed by his experience, so he turned and ran after the column.

The grim lines of marching figures streamed inexorably past the Floater. He could see poor Victoria shrinking away in terror inside the craft. . . .

Jamie ran beside the marchers with his camera clicking. He captured the extremes of expressions amongst the marching men. He saw grief and fear, triumph and disaster, anger and determination, hatred and remorse, all mirrored in the enormous eyes of the aliens.

Suddenly he stopped running. He stood frozen with fear at what happened next. For the head of the column had reached the cloud, which had become transparent, like an enormous crystal ball, clouded at the edges. And as the marchers entered the cloud they vanished.

Jamie found Dr. Who standing beside him.

"Astounding!" murmured the scientist. "It is indeed some kind of mirage—but not within my experience. . . ."

He broke off as Jamie grabbed his arm. He was pointing a trembling finger at the last of the column marching into the cloud. "Look! Am I going crazy, or is that a city?"

What they could see was enough to make them doubt the evidence of their own eyes. . . . It was like looking into a gigantic crystal-ball. Tall turrets and gleaming towers of weird design now filled the cloud.

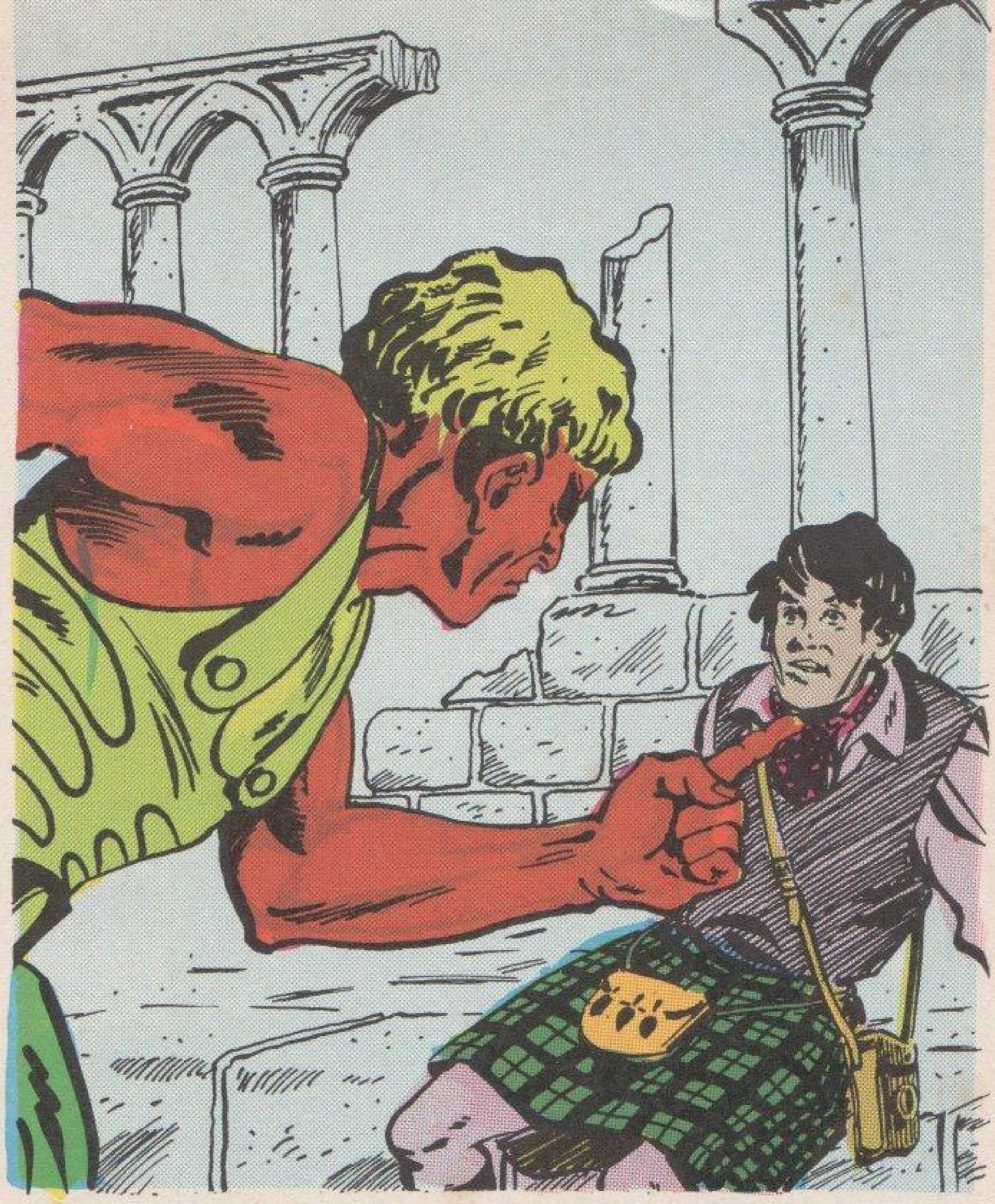
Dr. Who's voice was husky with wonder as he replied: "It's amazing . . . I believe the cloud must be some sort of displacement from a period of history that happened long ago on this planet. . . ."

Jamie was staring at him. "You mean—something like an echo?" he asked.

The older man nodded quickly. "That's it! An echo of some cosmic events across the corridors of Time to this moment *now*. . . . And like all echoes, it will ultimately fade. . . ."

He broke off as Jamie turned away towards the cloud. "Where are you going, boy?" he called.

"To get a closer look at that city



inside the cloud!" said Jamie over his shoulder. "If it's due to fade, I want to get a few pictures with my camera."

The Doctor moved hastily after him. "No! Come back, Jamie! You don't realise the dangers! Come back!"

But the other took no notice. He strode resolutely forward. The Doctor and Victoria saw him enter the fringes of the white mass—then he was gone!

As for Jamie, he wandered about inside the fringes of the cloud for a few moments like a fish in an aquarium. Only faintly could he see the outline of the mirage-city. All around him there was a glow. It shone like an incandescent bulb. . . .

Then for the first time he felt fear. There was a whisper around him. It rose to a terrifying screech. A great light swept towards him. . . .

Jamie shouted. The sound was caught and twisted by the forces whipping wildly about him.

He toppled and fell into a howling pit of sonic madness. Everything went dark as his senses slipped away.

His awakening was sudden and startling. One moment he was floating in an echoing nothingness, and the next he had his eyes open and saw that he was lying on a ledge of stone surrounded by the giant beings he had followed into the sonic cloud.

The voice of one reached him: it rumbled deep like thunder. "He wakes! Go and tell Ziita that the alien, who fell from nowhere, is conscious. . . ."

Jamie struggled upright. He stared at the circle of solemn faces. These looked like the men he had photographed. They leaned on their weapons a little wearily, and Jamie noticed that some were wounded.

As far as he could see they were in the ruins of some building that might have been a temple, to judge from the vast archways and ponderous marble steps.

Then Jamie became aware of a background of noise—the rumbling, whining, and earth-shaking background that could only denote a battle in full fury.

The giants watched him with curiosity but without fear as he rose to his feet. Jamie felt his own courage ebb as he looked up into the fierce brown face of the giant who had sent for Ziita.

"I—I seem to have lost my way in Time!" began Jamie. That sounded so fantastic that he was silent again.

The giant's only reaction was to lean down and lay a massive finger on the side of his cheek. "White skin!" he rumbled.

"Er—yes. . . . You see, I'm from a different planet and a different Age," said Jamie.

There was a sudden stir among the giants. A tall figure in a glistening helmet strode through their ranks.

"Hail, Ziita!" thundered the greeting.

The leader was an arresting figure, with burning eyes and a scar that zigzagged his lantern jaw. He stood staring until Jamie could bear it no longer and felt his hot blood mounting into flushed cheeks. . . .

"Now, see here! I don't know exactly how I got here, but it had something to do with a sort of cloud. . . . It was some sort of echo from your Time—*this* time. . . ."

Ziita's helmet flashed as he lowered his head in a deep bow. "You were sent from Otinogg, the God of War!" he rumbled. "The prophecy says that a small creature with white skin and strange talk will be sent. He will lead us into battle against the Scythias. . . ."

Jamie felt panic clutch at his insides. He took a grip of himself and answered: "You expect *me* to lead you into battle? Sorry, friend! But I'm not the warlike sort. . . . Your prophet must be talking about someone else—not me!"

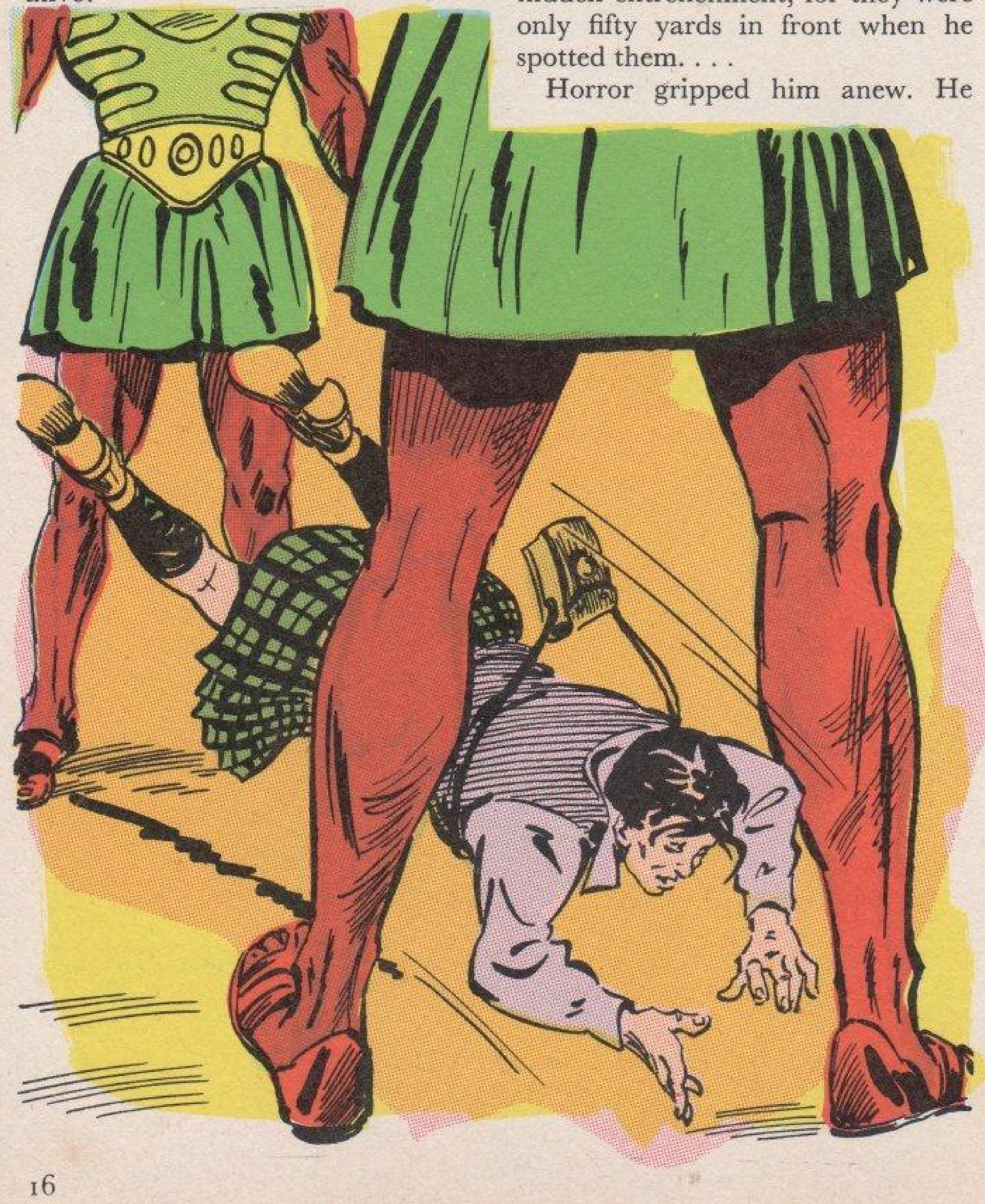
His words seemed to have no effect upon Ziita. The leader waved an imperious hand to his followers. "Sound the attack! . . . Two of you escort the strange one to march ahead of our battalions. . . . At the sight of him the Scythias will turn and flee—for they, too, know the prophecy. . . ."

Jamie had been quickly eyeing his chances of escape. He was surrounded by the warlike giants—but one of them stood with his legs apart. Like a flash Jamie dived through those straddled legs.

The giants were slow in their reaction. Before they had rumbled a cry of alarm and turned to pursue, Jamie had reached the cover of a carved pillar. As he flung himself behind it, one of the soldiers levelled his strange-looking weapon. . . .

Zrr-rr-owee! A splutter of sparks left the muzzle. Jamie felt the heat of a blistering ray singe the back of his neck. He glanced up to see a smouldering ridge gouged in the solid rock.

Then came Ziita's angry voice: "No! Do not harm him! Take him alive!"



Jamie came to his feet with a bound. He made for a gaping hole in the wall and scrambled through.

He began running fast across the flat, featureless ground. He saw the giants coming after him from the ruin.

He knew where he was now. He recognised the flat expanse before him as the plain on which the *Tardis* had landed, and where he had seen the cloud.

He had no idea where he was heading for. He knew that only desert lay before him on this dying planet. But a vague hope that Dr. Who might find some way to bridge the Time gap spurred him on.

The giants were gaining on him. He could hear the thunder of their feet behind. Then a rumbling cry from behind warned him of a new danger. . . . "The Scythias!"

They must have risen from some hidden entrenchment, for they were only fifty yards in front when he spotted them. . . .

Horror gripped him anew. He stopped dead. His stomach heaved with revulsion. . . .

The Scythias were like monstrous slugs. Their obscene, bulbous bodies, protected by some transparent armour, writhed as they wriggled towards him at an astonishing rate.

Then he spotted their weapons, and he guessed that it was not himself they were interested in, but the giants.

"Great guns! I'm right in the line of fire when the two sides open up on each other!" gasped Jamie.

A depression in the ground—some sort of shell-hole—opened up mercifully at his feet. He flung himself forward and rolled down the slope.

Behind him the weapons sang their hissing, sizzling songs of death as the battle began.

Jamie lay flat, panting hard. Then he scrambled up with a gasp. . . . Five feet away something nebulous was beginning to materialise. Something white . . . misty. . . . It crept out of the ground, or so it seemed, and it swelled into something he recognised. . . .

"The cloud!"

The next moment a familiar figure stepped from the edges of the cloud.

"Dr. Who!" yelled Jamie, springing forward.

The scientist grabbed his hand. "Quick, my boy! Into the cloud! Hold my hand and don't let go!"

Jamie obeyed. He plunged into the white mass, and felt his head spin with the ringing of the sonic changes. . . .

For a moment he lost consciousness. When he sat up again, he was aware of the silence. He stared around.

Dr. Who stood near by, calmly playing his pipe. . . .

And of the cloud there was no sign.

"I—I . . . was it some sort of dream?" asked Jamie weakly.

"No, it wasn't!" said Dr. Who crossly. "You had a very dangerous experience—and you're lucky I was able to snatch you back! Next time perhaps you'll listen to me when I give you a warning. . . . And now let's get back to the Floater. Poor Victoria must be quite worried about us."

The sun is estimated to be about 7,500 million years old and our galaxy between 10,000 million and 12,000 million years old. In December 1959 it was computed that the old star cluster NGC 188, on the edge of our galaxy, had burnt 18 per cent of its hydrogen and may therefore be as much as 24,000 million years old.

Of those measured, the star with the greatest diameter is the red giant *Epsilon Aurigae B* at 2,500 million miles. This star is so vast that our own solar system of the sun and the six planets out as far as Saturn could be accommodated inside it.

STAR FACTS

The first object from the earth to reach another planet was the U.S.S.R.'s Venus 3 weighing 960 kilogrammes (2,116 lb.) which was launched on 16 November 1965, and impacted on Venus at 6.56 a.m. G.M.T. on 1 March 1966.

As there is no water on the moon, the heights of mountains can only be measured in relation to low-lying terrain near their bases. The highest of measured lunar mountains are those in the Leibnitz Range, near the moon's south pole, which rise to nearly 35,000 feet.

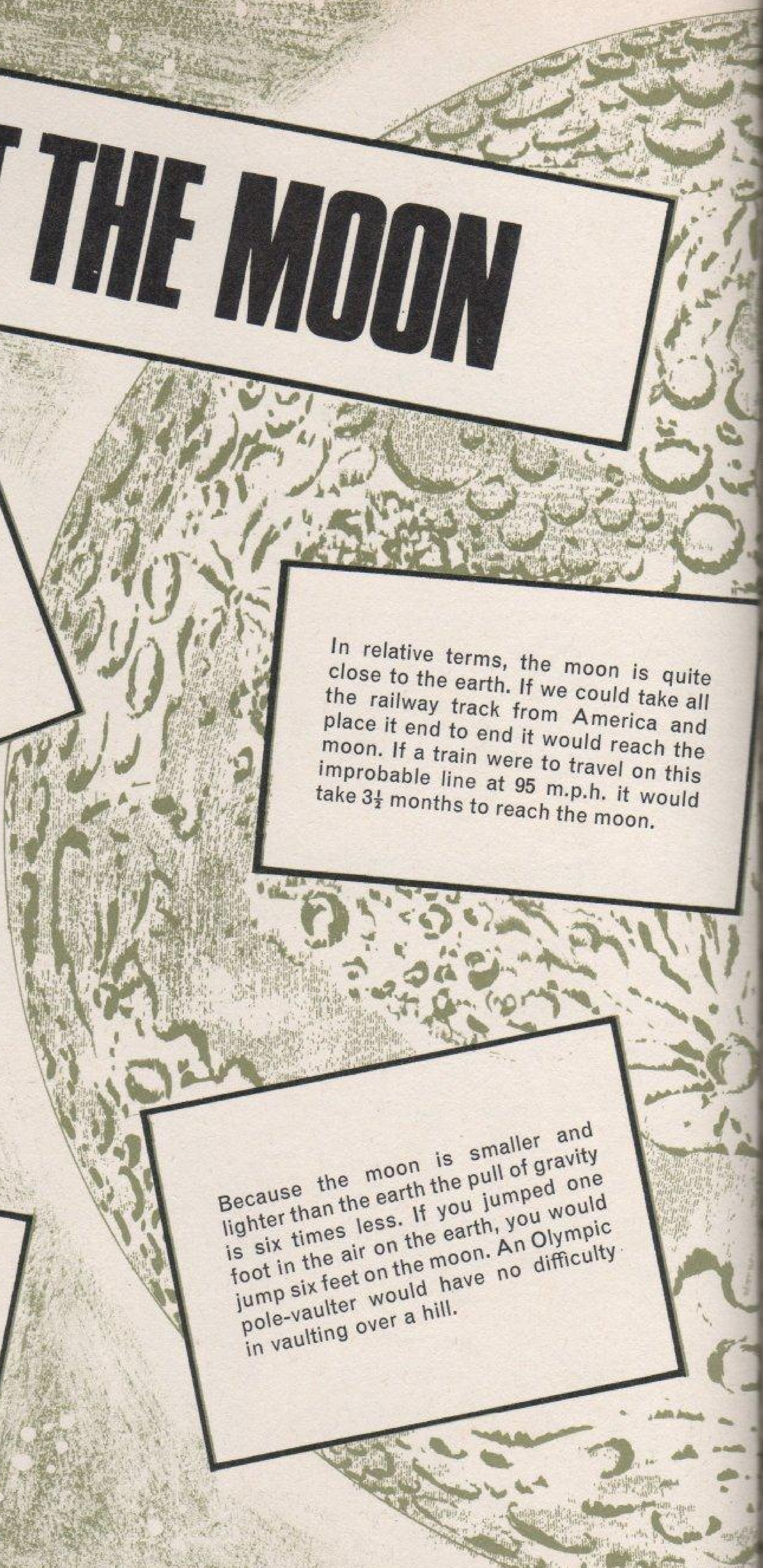
When the sun is overhead the temperature of the lunar equator reaches 214°F. (2°F. above the boiling-point of water). By sunset the temperature is down to 58°F. but after nightfall it sinks to a low temperature of —250°F.

Comets are so tenuous that it has been estimated that even the head of one contains little solid matter. In the tail 10,000 cubic miles contain less than a cubic inch of solid matter. These tails, as in the case of the Great Comet of 1843, may trail out to 200 million miles.

Owing to sulphur particles in the upper atmosphere from a forest fire covering 250,000 acres between Mile 103 and Mile 119 on the Alaska Highway in Northern British Columbia, Canada, the moon took on a bluish colour, as seen from Great Britain on the night of 26 September 1950. The moon also appeared blue after the Krakatoa eruption of 27 August 1883.

A light year is the distance travelled by light at 670,616,700 miles per hour in one solar year (365·24219878 days) and is 5,878,500,600,000 miles.

ABOUT THE MOON

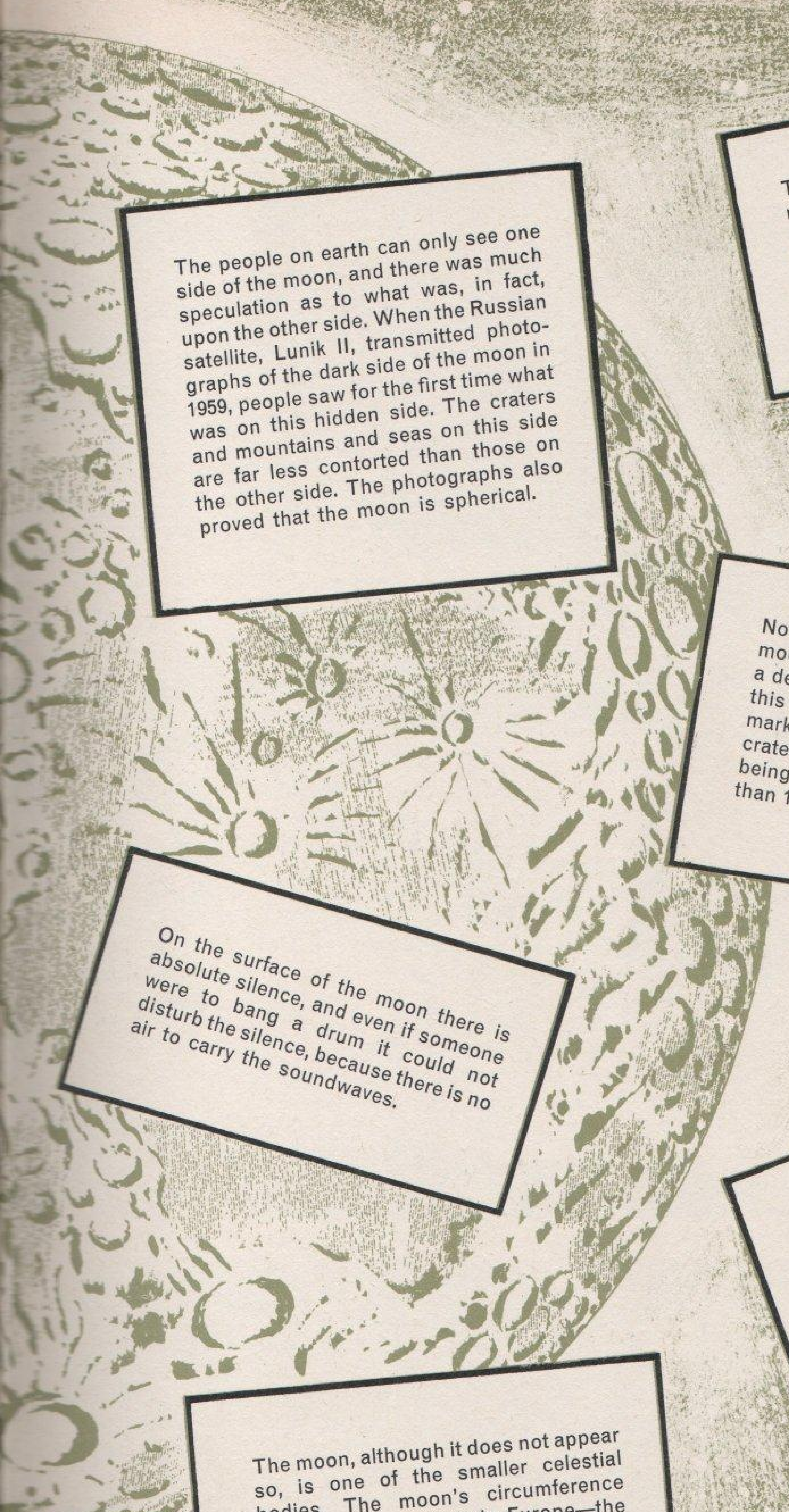


The moon has no atmosphere of its own, unlike the earth; consequently, even during the day when the sun is visible the sky remains black. The lack of atmosphere also accounts for the moon's sharp outlines.

In relative terms, the moon is quite close to the earth. If we could take all the railway track from America and place it end to end it would reach the moon. If a train were to travel on this improbable line at 95 m.p.h. it would take 3½ months to reach the moon.

In ancient times, man worshipped the moon, and the Greek goddess Artemis and the Roman goddess Diana were both goddesses of the moon. Ancient man was terrified of eclipses for he had no scientific knowledge to explain them. People used to believe that the moon was inhabited, even up to a hundred years ago.

Because the moon is smaller and lighter than the earth the pull of gravity is six times less. If you jumped one foot in the air on the earth, you would jump six feet on the moon. An Olympic pole-vaulter would have no difficulty in vaulting over a hill.



The people on earth can only see one side of the moon, and there was much speculation as to what was, in fact, upon the other side. When the Russian satellite, Lunik II, transmitted photographs of the dark side of the moon in 1959, people saw for the first time what was on this hidden side. The craters and mountains and seas on this side are far less contorted than those on the other side. The photographs also proved that the moon is spherical.

The first astronauts on the moon will need both visors and some form of cooling equipment, due to the intensity of the sun whose rays shine blindingly, with a bluish light, heating the moon's temperature up to over 200 degrees.

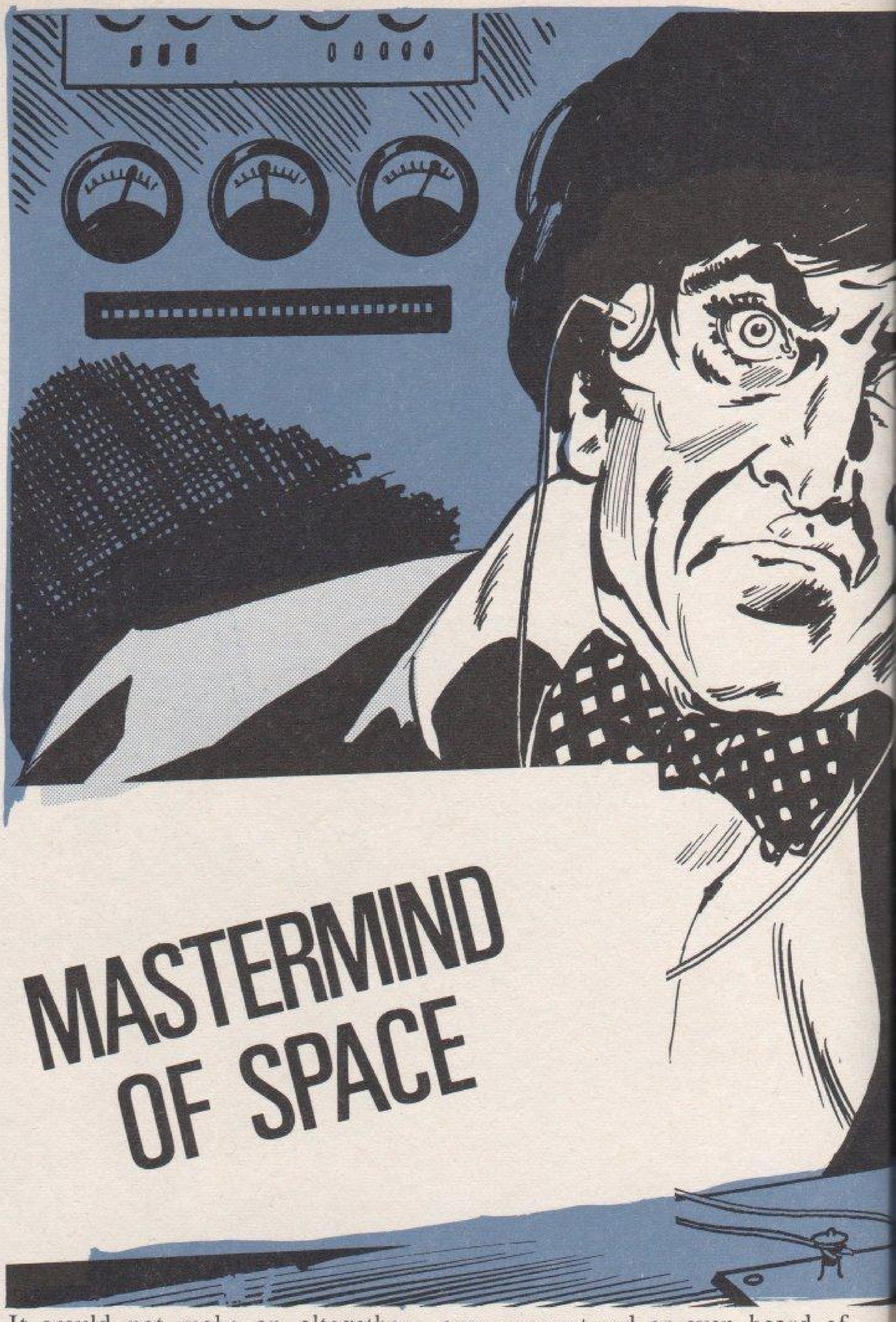
No one knows how the craters of the moon were formed. Round each one is a desert of pebbles and dust, and it is this which we see on earth as the blue marks on its surface. Some of the craters are huge, the Newton Crater being 150 miles in diameter, and more than 10 miles in depth.

On the surface of the moon there is absolute silence, and even if someone were to bang a drum it could not disturb the silence, because there is no air to carry the soundwaves.

Because there is no atmosphere, and consequently no weather, on the moon, the mountains and craters are sharp and jagged. This is because the normal agents of erosion, wind and water, are missing. The high jagged mountains and the deep craters are all covered with layers of dust of varying thicknesses.

The moon, although it does not appear so, is one of the smaller celestial bodies. The moon's circumference would not even encircle Europe—the second smallest continent.

MASTERMIND OF SPACE



NOW Dr. Who was as downcast and dejected as ever Victoria and Jamie had seen him. Truly he had been toppled from the pedestal on which he always fancied he stood in relation to common mortals. With his marvellous *Tardis* and his universe-wandering history, his ranging backwards and forwards through the labyrinths of Time, he had always been sure that his was the greatest scientific mind of any century. Now, at last, it seemed he had met his masters.

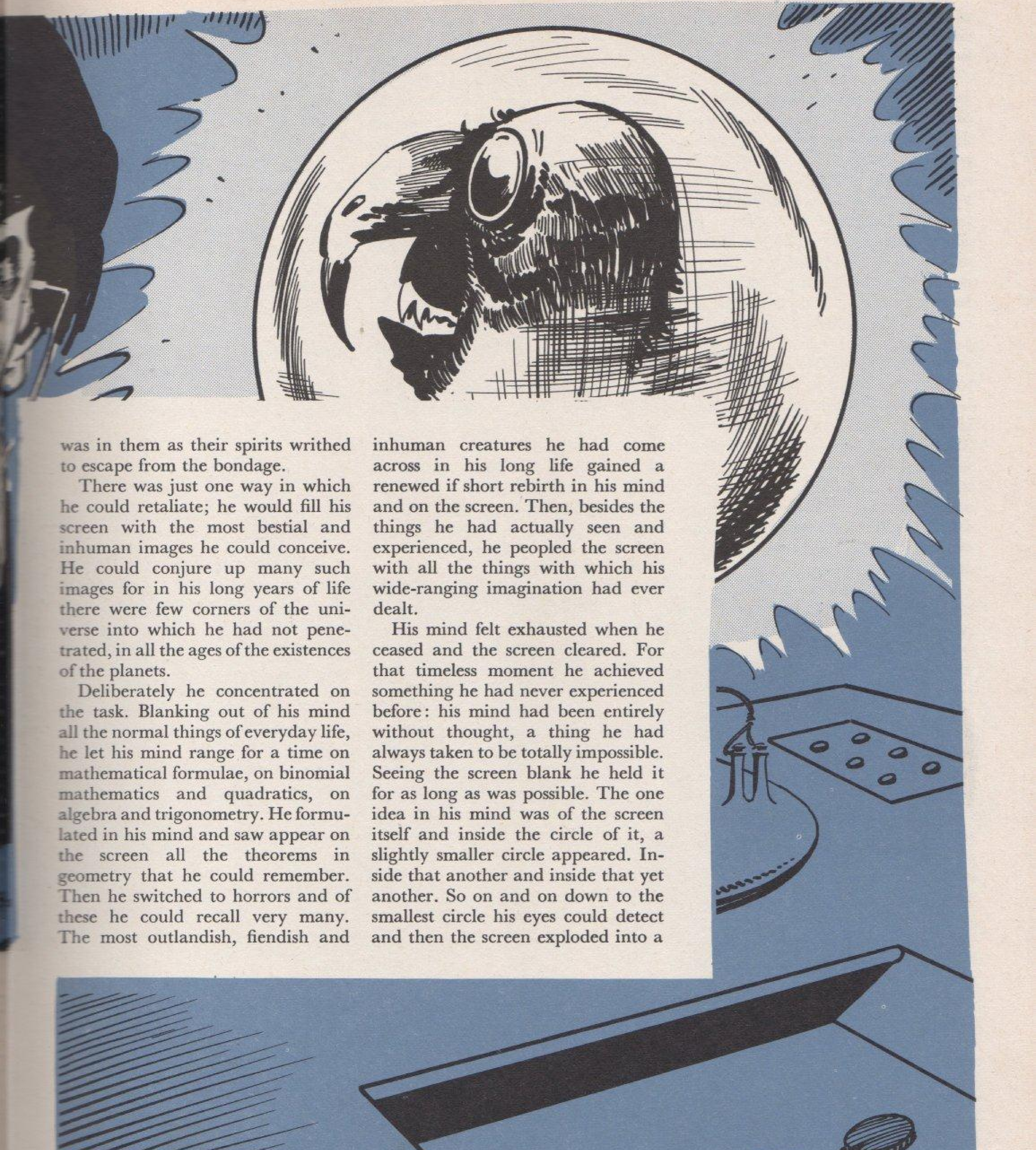
That they were, all three of them, under the influence of heavy hypnotic force was quite obvious. He could tell that from the absent look in the eyes of his fellow-travellers, Victoria and Jamie. The *Tardis* stood close by, neglected now. They had heard their captors entering it and obviously examining it, although they had not seen them. Then they appeared to have left it, as one would examine with interest some ingenious toy of a child, and then, losing interest, discard it as of no consequence.

They were not alone. An enormous corridor contained thousands, perhaps millions of cubicles. Dr. Who was in one, Jamie in the next and Victoria in a third. Electrodes were sealed to their temples and in front of each was a round glass screen. Every thought that passed through their minds appeared as a fleeting picture on the screen, and the Doctor had a shrewd notion that the cables from the rear of the screens were transferring an electronic picture to some hidden recording device. Their brains were being picked, all their thoughts and memories and imaginings would be in that record, for their captors to witness, to store, and perhaps to use!

There was no real mystery about the place itself. In their minds it had been shown telepathically as soon as they had emerged from the *Tardis* into the web of mind-stuff. They were prisoners of the Masters of Space and Time, and their only use to their jailors was to record the history of the times and the worlds they had come from, and the ways of life of all the inhabitants; the animals, insects and plant-life, the buildings, artifacts and technology. It would not make an altogether complete encyclopedia of Earth, but it would go a very long way towards it.

Dr. Who tried to move but found that his whole body was rigid. There were no bonds of any description and he was staggered by the discovery. His mind was entirely free but he was as immovable as if he was a stone statue. The invisible beings which had captured them as soon as they had left the *Tardis* must be entities quite beyond any he had ever encountered or even heard of in his wanderings through Time and Space. Their hypnotic grip was as tight as steel and yet it left the mind and the brain as free as air.

Dr. Who hadn't seen the creatures; he had merely heard low voices and a crackling sound—both directly in his brain and not through his ears—as they had passed behind him. He thought with despair of the youngsters, of Jamie and Victoria, sitting like statues in their cubicles, their young minds pouring out all that



was in them as their spirits writhed to escape from the bondage.

There was just one way in which he could retaliate; he would fill his screen with the most bestial and inhuman images he could conceive. He could conjure up many such images for in his long years of life there were few corners of the universe into which he had not penetrated, in all the ages of the existences of the planets.

Deliberately he concentrated on the task. Blanking out of his mind all the normal things of everyday life, he let his mind range for a time on mathematical formulae, on binomial mathematics and quadratics, on algebra and trigonometry. He formulated in his mind and saw appear on the screen all the theorems in geometry that he could remember. Then he switched to horrors and of these he could recall very many. The most outlandish, fiendish and inhuman creatures he had come across in his long life gained a renewed if short rebirth in his mind and on the screen. Then, besides the things he had actually seen and experienced, he peopled the screen with all the things with which his wide-ranging imagination had ever dealt.

His mind felt exhausted when he ceased and the screen cleared. For that timeless moment he achieved something he had never experienced before: his mind had been entirely without thought, a thing he had always taken to be totally impossible. Seeing the screen blank he held it for as long as was possible. The one idea in his mind was of the screen itself and inside the circle of it, a slightly smaller circle appeared. Inside that another and inside that yet another. So on and on down to the smallest circle his eyes could detect and then the screen exploded into a maelstrom of lighted colours. Impulsively, he attempted to move and—he stood up!

The electrodes fell from his head as he left the chair and moved out of the cubicle. The screen still showed the flaring of those fantastic colours, surely many of which the spectrum of all the galaxies he had known did not contain. The colours moved in a myriad fantastic shapes, shapes that had a symbolic meaning and shapes which were outside of mathematical Time and Space and had no meaning in his knowledge.

He stared into the cubicle where Jamie sat and to where Victoria was and then he moved towards Victoria. But it was as if he met a solid but quite invisible barrier. He fought to pass it, but it was of no avail. Then stolidly he stood where he was, waiting. Something told him that his captors were aware of the situation and were doing something about it. He could not resist minds of such titanic powers as these entities must possess.

"Come," said a faint voice in his head, a voice that came from no physical throat and larynx. "Come to us. We would converse with you. The like of you we have never before encountered."

Like an automaton he moved and passed along the great line of cubicles. As he passed his hair rose on his head as he looked at the things inside the cubicles. Many were of men of the type with which he was familiar; others were, to his eyes, monsters, though in their own spheres they would be normal intelligent creatures. Some were encased in globes of glass filled with water or other fluids, or with gases of various colours. Most were animals in various shapes and forms, and some were more strictly vegetable.

If he had fondly imagined that his own fantastic memories would interest or startle his jailors he had been sadly mistaken. For here were to be seen creatures which even his imagination had never even begun to envisage. He was damp with perspiration when the voice spoke again in his mind.

"It was not your total recall that drew our attention to you, Man," the voice said. "It was that other thing. In countless ages we have never before encountered a being who can think of *nothing*. This we must understand, for we thought we were the only intelligent species which could still its mind. This we must know and understand for this is new—new in an old, old universe which knows only continual change and nothing new. You must not fear us. No harm will come to you. All the subjects you have seen are in no discomfort or pain. Their physical needs are being supplied and when their minds have yielded to us all that they know, they will be released into their own spheres again."

"Pah!" thought Dr. Who to himself. "What utter nonsense all this is! "Who are these beings who dare to do this to their fellow-creatures? Wait until I come face to face with them, I'll tell them."

"We look forward to that, Man," whispered his mind. "We are releasing your two companions for we sense the bond there is between you three."

At these words Victoria gave a little scream and Jamie held her up to stop her from falling. The wires fell from their heads and they gathered round the Doctor.

"Doctor, Doctor, where are we?" clamoured the girl. "What dreadful place is this? My head's aching so much."

"We're in no danger, Victoria," Dr. Who soothed her, and he took one of her hands and then one of Jamie's.

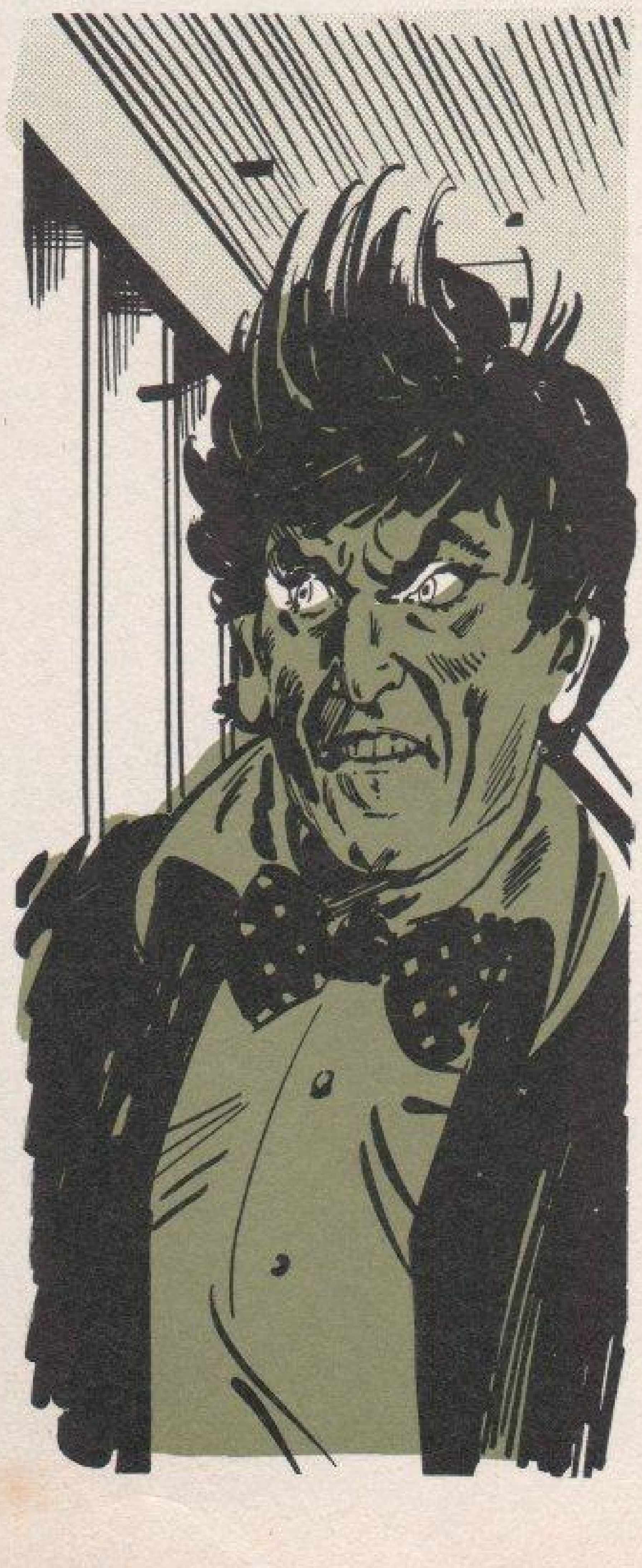
"Make no attempt to struggle, children. You, Jamie, try and keep your mind as blank as possible."

Jamie laughed. "That's a thing I could never do, Doctor. Nobody can make their mind blank. Even when I'm asleep I'm dreaming all the while."

Dr. Who looked at him with pursed lips. "Could you imagine you were *thinking* of *thinking*? That would be a start. I've found that I can blank out all my personal thoughts—for a very short time, admitted. That's why we've been released. One thing I must warn you about. Every smallest thought that passes through your mind is being monitored by some one or some thing. So be as careful as you can. Come, follow me, we are being led before our captors."

The long corridor ended at last and then a sudden sickness almost overcame all three of them. A great black hole into nothingness loomed before them. They were looking out through the great hole into Space itself. It was Space without stars, without galaxies, as far as their eyes could see, ultimate outer Space where there could be no light, no sound, no being.

But in this awful gulf there *was* light! Seven things appeared out there at a totally indeterminable distance. Seven tiny, glinting objects, the shape of which they would never remember, if ever they did apprehend it. They shone, if it could be described as shining, with a light that surely was not the electro-magnetic radiation of the physical universe they knew.



"You see us now," said the voice in his mind and, from the expression on the faces of the others, he knew they were hearing his mind-talk too. "You see us because we have affected your retinas so that you can see us. We have no forms and no physical bodies; we are composed of raw energy. In your universe you name it electricity. We have another symbol for it but in reality it is the raw, basic mind-stuff out of which all material things—the stars, the worlds, the beings that dwell upon them—are born."

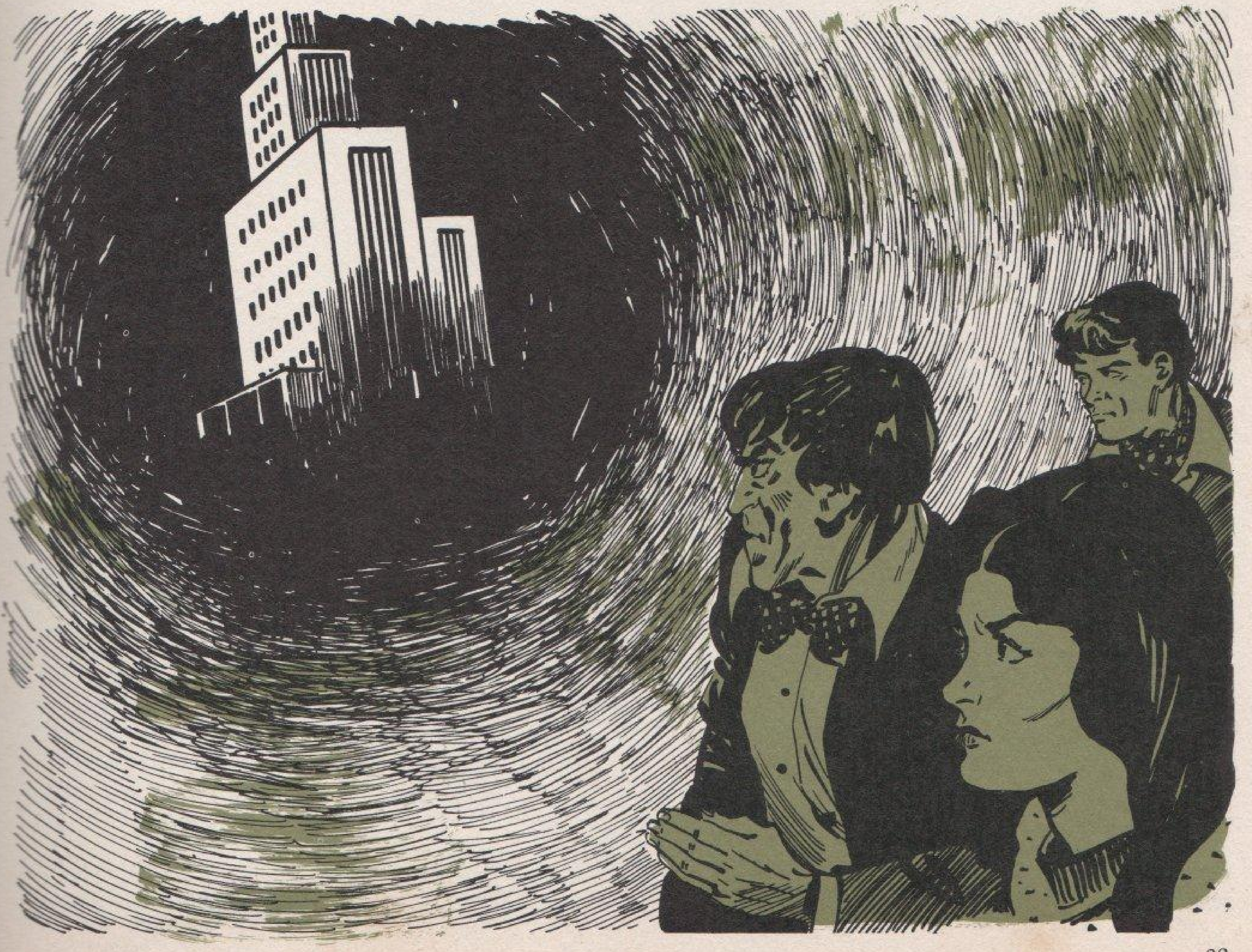
"You speak as though you were Gods," scoffed Dr. Who scornfully. "Such beings as you say you are cannot possibly exist."

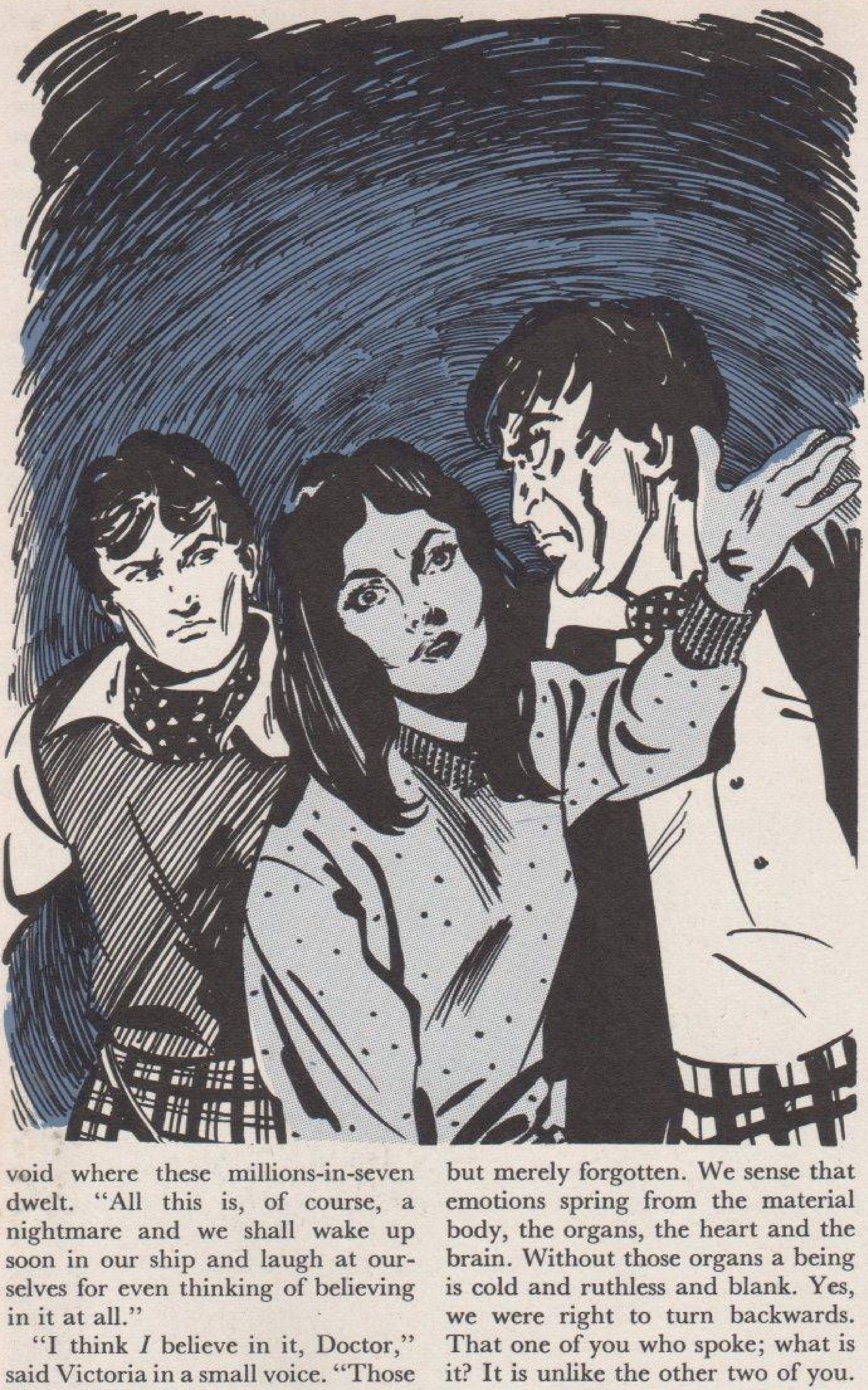
"Once we were much as you are now," came the voice in his head, taking no notice of his interjection. "That was a period in the remote past of which you could form no conception, many, many millions of your years ago. We grew and we evolved through all the ages until we were able to discard our physical forms and dwell in the void without form or habitation, bodiless intelligences needing no material vehicle. You see seven of us in this place here and now. We seven are composed of the joined together essences of many millions of us. The power of our intellects is greater than you can even imagine. We will give to your tiny human minds a demonstration. Look with your human eyes."

Then appeared something which ever afterwards they would never believe they had seen. A huge building appeared, forming itself in the void before them with no hands or tools. It vanished and a succession of familiar objects grew before their eyes, grew out of nothing into completion or ceased and dissolved when halfway finished.

"We can create matter out of the mind-stuff of the void by the power of our own minds," came the non-human voice in their heads. "We formed this place and we endowed it with air and water and the necessary gases and chemicals needed by the inhabitants of the worlds of your galaxy. For we have now realised that we have reached the ultimate in our evolution. There is no further we can go. Countless millions of ages have we dwelt in the void, content. We have contemplated our own excellence and power until now we grow weary of it all. We realise that all existence runs in gigantic circles and that we must retrace our circle of being, back to the beginning. We will again have forms and bodies, once more we will dwell on planets of suns. We will go back to the very childhood of the order of being, and we will start again."

"All this is, of course, nonsense," said the Doctor stoutly, speaking into the empty void. He could almost see where the envelope of atmosphere ended with the cold non-being of the





void where these millions-in-seven dwelt. "All this is, of course, a nightmare and we shall wake up soon in our ship and laugh at ourselves for even thinking of believing in it at all."

"I think *I* believe in it, Doctor," said Victoria in a small voice. "Those poor things out there, all alone in this dead, cold emptiness. Doesn't your heart yearn to help them, if we can?"

Jamie began to speak hotly but Dr. Who gripped him by the arm and hissed for silence. There had been a change in the seven almost invisible lights.

"Another new thing to us," the voice said. "Emotion! Now, that is a new thing to us. Perhaps not new but merely forgotten. We sense that emotions spring from the material body, the organs, the heart and the brain. Without those organs a being is cold and ruthless and blank. Yes, we were right to turn backwards. That one of you who spoke; what is it? It is unlike the other two of you. It is compassionate; it thinks of us rather than of itself. Tell us, for we would know more of this. It may even be that all our work on the screens may be valueless compared to this new thing."

"Speak, Victoria," said Dr. Who hoarsely for now he was really beginning to believe that they were in the presence of something so new and so fantastic that there were almost no words to meet it. Into his mind flooded pictures of that void and of the ages during which the seven had ranged the void searching for they scarcely knew what. By chance they had found the galaxy of matter in which Dr. Who and his companions dwelt. These entities were going about the task of *building* a galaxy of stars and worlds where they could again dwell in solid bodies! That such a thought could come into his mind of his own will was totally impossible, of that he was sure. So—it had been put there by these nameless, enigmatic seven.

Gathering their specimens by mind-power they had formed this place in a million ways different, so that each kind and species would be present. The minds of the specimens were being dredged of all impressions and knowledge and the seven would then put in train the physical processes which would at some remote period form a galaxy of stars. And, to cap it all, these seven beings, composed of raw energy, called this physical state of mind-in-matter, the *childhood* of a race!

"I'm sorry for you," stammered Victoria. "Poor things out there, all alone. No world to live in. No sun and moon and stars. No animals to care for and no flowers to worship. How have you lived all these many years?"

"Eh, now, what's the game, Doctor?" muttered Jamie. "These things must be monsters to do all this; to steal all these creatures from millions of the worlds in the Milky Way, just to suck their minds dry."

"Hush, boy," said the Doctor sternly. "Victoria is about to do something that no human being has ever done before. She is going to call into existence a new human race, born this time, if I know our Victoria, of compassion and pity, of love and unselfishness. It will be very many ages before the galaxy that will be born appears and we will never see it. Of the beginnings of our own galaxy we know nothing, but we know now that the new galaxy that will form in this corner of the universe will at least start on the right lines."

"Phew, Doctor," panted Jamie. "That went clean over my head."

"I think it was a little over my head too, Jamie," whispered the Doctor. "Let's leave it to Victoria. She's in command now, I think."

"We recall now those things you speak of, strange small one," the voice was saying. "We recall but we cannot imagine what you name as emotions, so long a time is it since we had organs of living. We would learn of these new emotions. We can fabricate stars and worlds from protons and electrons, and we can take on forms again, the forms we grew out of millions of ages gone. Will these *emotions* be capable of reproduction as the material sphere will be?"

"I . . . I . . . don't know," stammered the girl. "They've *always* been present in the human race. I remember reading . . . oh, there were wise men who tried to find the soul in the brain, in the heart, in almost every part of the body. To me there always have been such emotions. Life without them is to us quite unthinkable. To us, on our Earth, Love is the most powerful force of all. To us Love is what *you* seem to us, the energy that made everything go right."

"We have learned enough," said the voice. "Our recordings are completed and we will disband this enterprise of learning. All the subjects will be returned to their own worlds in their own times and none will remember what has happened here save maybe in dreams which then they will forget. The small one we will keep with us for she will be a model for our new species in the new nebulae of stars which we will name Victoria, for we perceive that is her name."

"Come now," said the Doctor angrily. "You cannot do that. Victoria must go with us. You cannot keep her prisoner for ever. Her lifespan is short——."

"Let me tell them, Doctor," said Victoria and he could sense that she was fighting the cold terror in her heart at the mere idea of being alone in this empty void with these enigmatic creatures of energy. "I will make them understand." She turned out again to the void and her hand reached for Jamie's.

"There are three of us here," she said with a tremble in her voice. "You must let us all go, we two and the Doctor, who is our guide and friend. If you keep me here alone, your new universe will begin falsely. The first rule you must learn is that no being ever should force another being to do or say or think anything it does not want to do or say or think. Start on that one rule and everything will be all right."

"We understand," replied the voice and already Dr. Who thought he could detect a small warmth in the voice which before had been completely passionless. "We will learn of you. But—this other small one with you. Why do you hold its limb with your limb? It is of very much baser flesh."

"Eh, eh," shouted Jamie irritably. "Who's calling names?"

But Victoria was speaking outwards again. "Have you so entirely forgotten your own origins?" she asked gently. "I am Woman and Jamie is Man. We two are the prototypes of the bricks out of which you will build your new cosmos."

Then they were back in the *Tardis* and the void around them was now quite featureless and empty.

"To think of a new galaxy named Victoria!" said Dr. Who mischievously. "Peopled with millions and millions of Victorias and Jamies. But you both look blank. I'm a foolish old man. What nonsense am I babbling? You know, I've been having the most astounding dreams lately. It's high time I woke up."

THE UNKNOWN WORLD UNDER THE SEA

Over 70 per cent of the Earth's surface is covered by water. Yet for all we know about the oceans they might just as well be another planet. If man has tamed the land then he has yet to start controlling the oceans, with their savage storms and weird sea creatures.

Remarkable though it may seem there are probably creatures in the deep of which we know nothing. An illustration of this ignorance is the case of a fish called the coelacanth, brought up in the net of a fishing-boat in the Indian Ocean. Scientists were astonished when they heard of the netting of this fish, which was thought to be extinct millions of years ago.

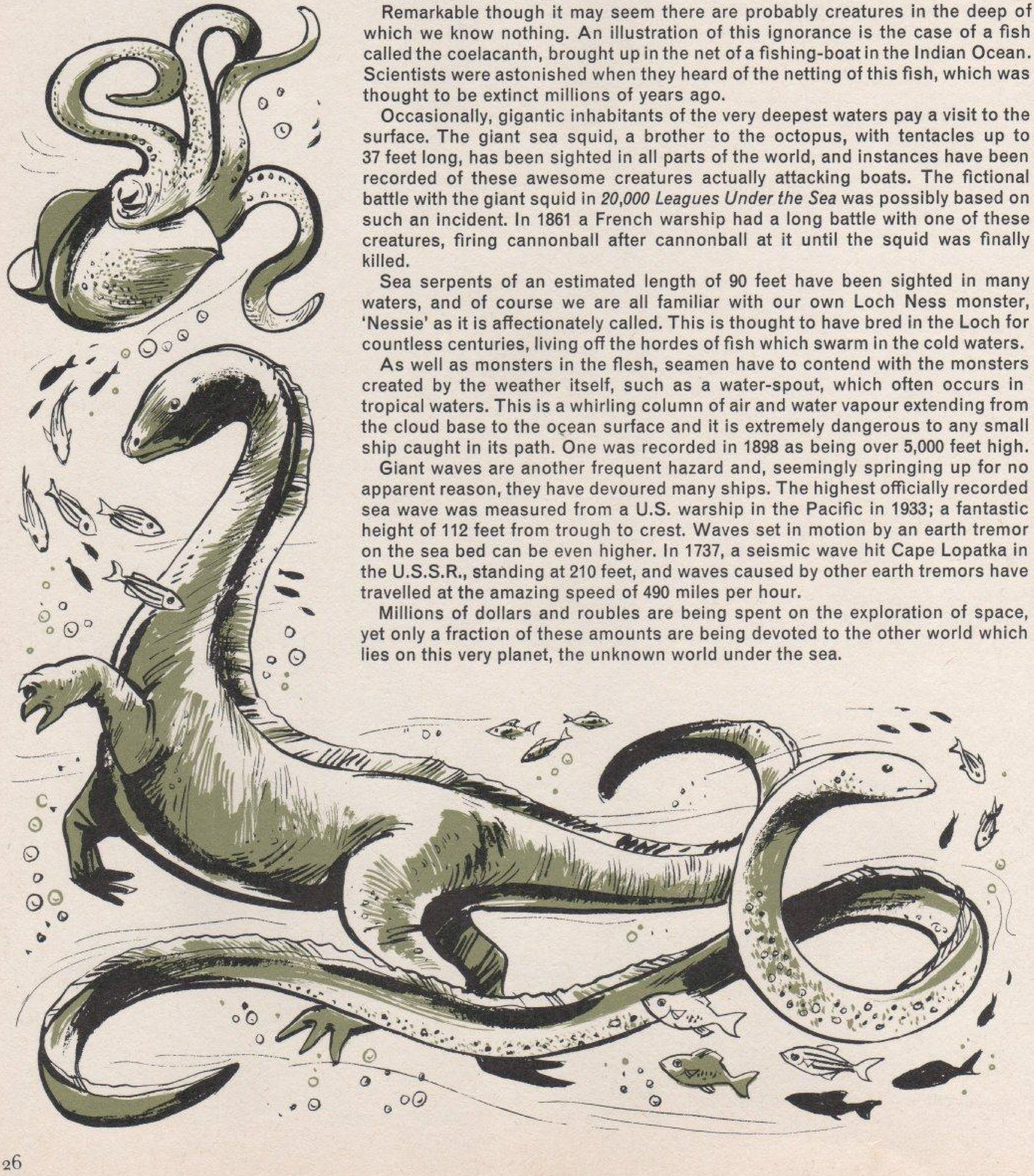
Occasionally, gigantic inhabitants of the very deepest waters pay a visit to the surface. The giant sea squid, a brother to the octopus, with tentacles up to 37 feet long, has been sighted in all parts of the world, and instances have been recorded of these awesome creatures actually attacking boats. The fictional battle with the giant squid in *20,000 Leagues Under the Sea* was possibly based on such an incident. In 1861 a French warship had a long battle with one of these creatures, firing cannonball after cannonball at it until the squid was finally killed.

Sea serpents of an estimated length of 90 feet have been sighted in many waters, and of course we are all familiar with our own Loch Ness monster, 'Nessie' as it is affectionately called. This is thought to have bred in the Loch for countless centuries, living off the hordes of fish which swarm in the cold waters.

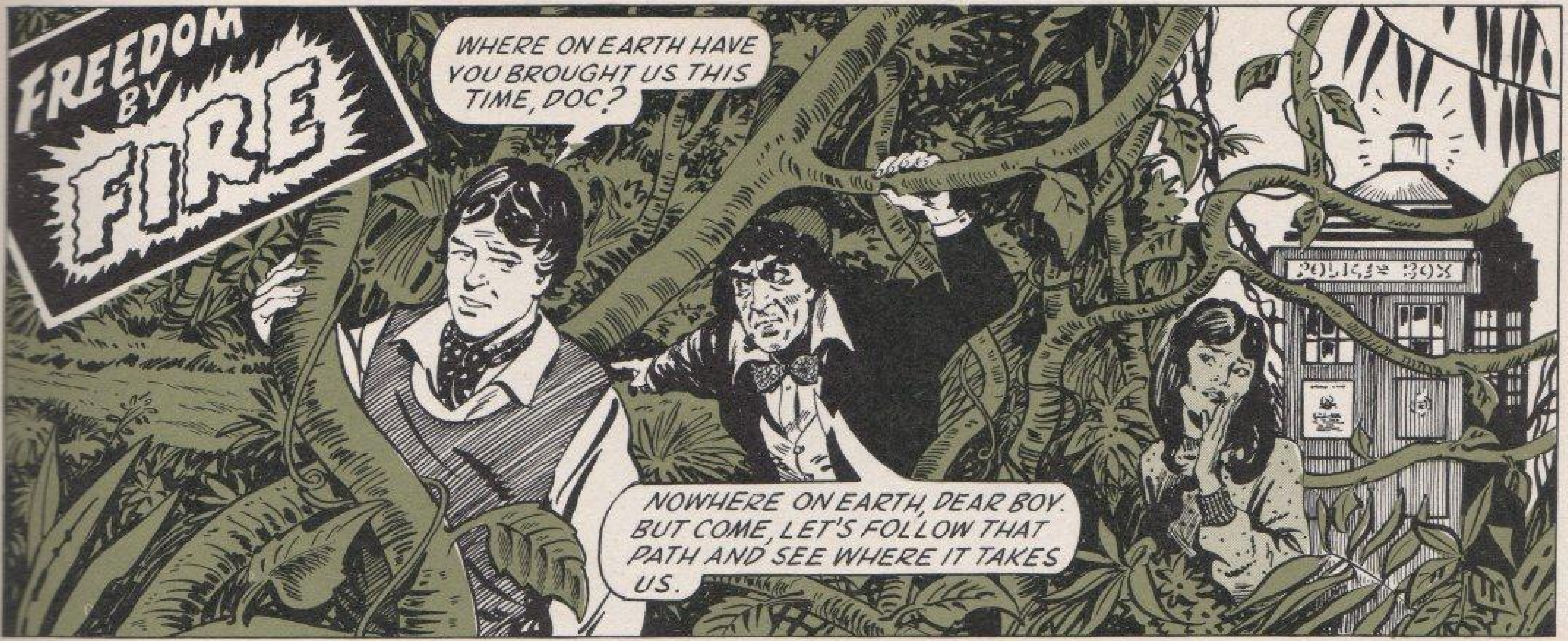
As well as monsters in the flesh, seamen have to contend with the monsters created by the weather itself, such as a water-spout, which often occurs in tropical waters. This is a whirling column of air and water vapour extending from the cloud base to the ocean surface and it is extremely dangerous to any small ship caught in its path. One was recorded in 1898 as being over 5,000 feet high.

Giant waves are another frequent hazard and, seemingly springing up for no apparent reason, they have devoured many ships. The highest officially recorded sea wave was measured from a U.S. warship in the Pacific in 1933; a fantastic height of 112 feet from trough to crest. Waves set in motion by an earth tremor on the sea bed can be even higher. In 1737, a seismic wave hit Cape Lopatka in the U.S.S.R., standing at 210 feet, and waves caused by other earth tremors have travelled at the amazing speed of 490 miles per hour.

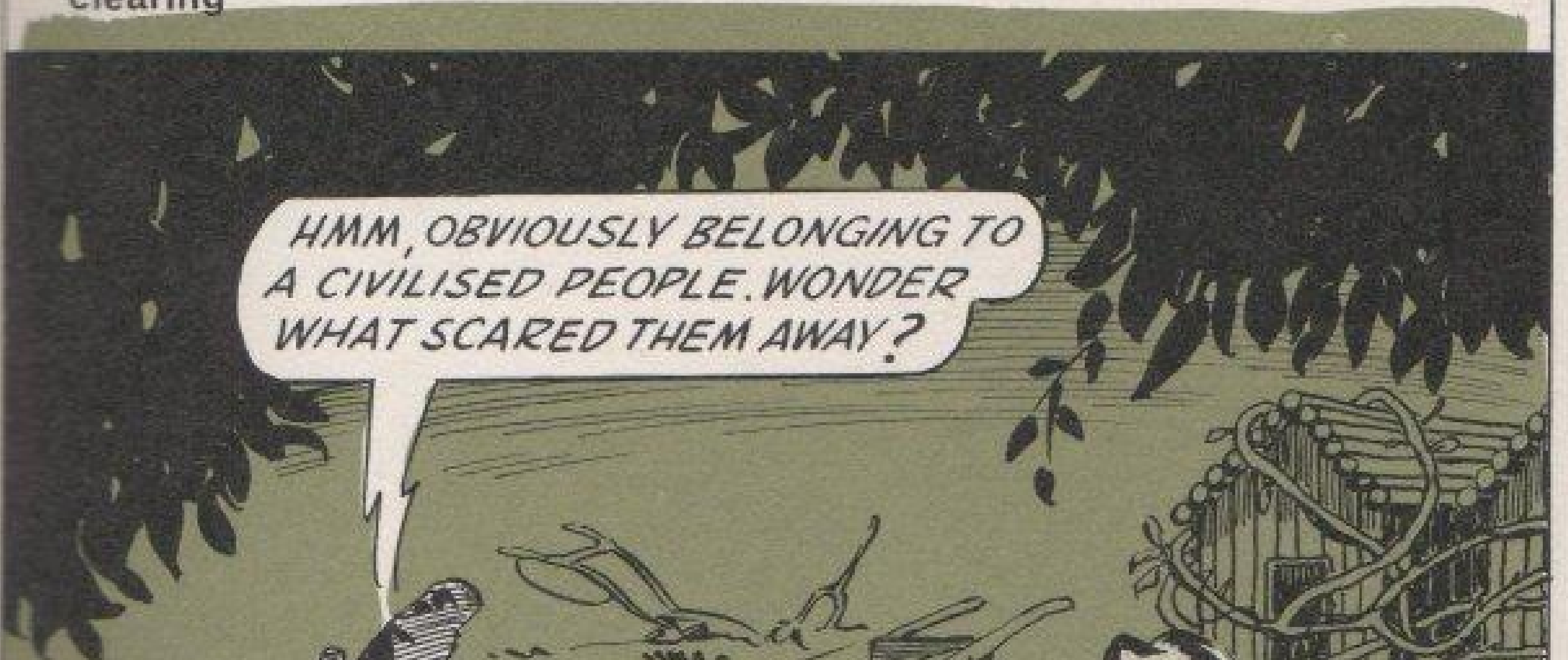
Millions of dollars and roubles are being spent on the exploration of space, yet only a fraction of these amounts are being devoted to the other world which lies on this very planet, the unknown world under the sea.

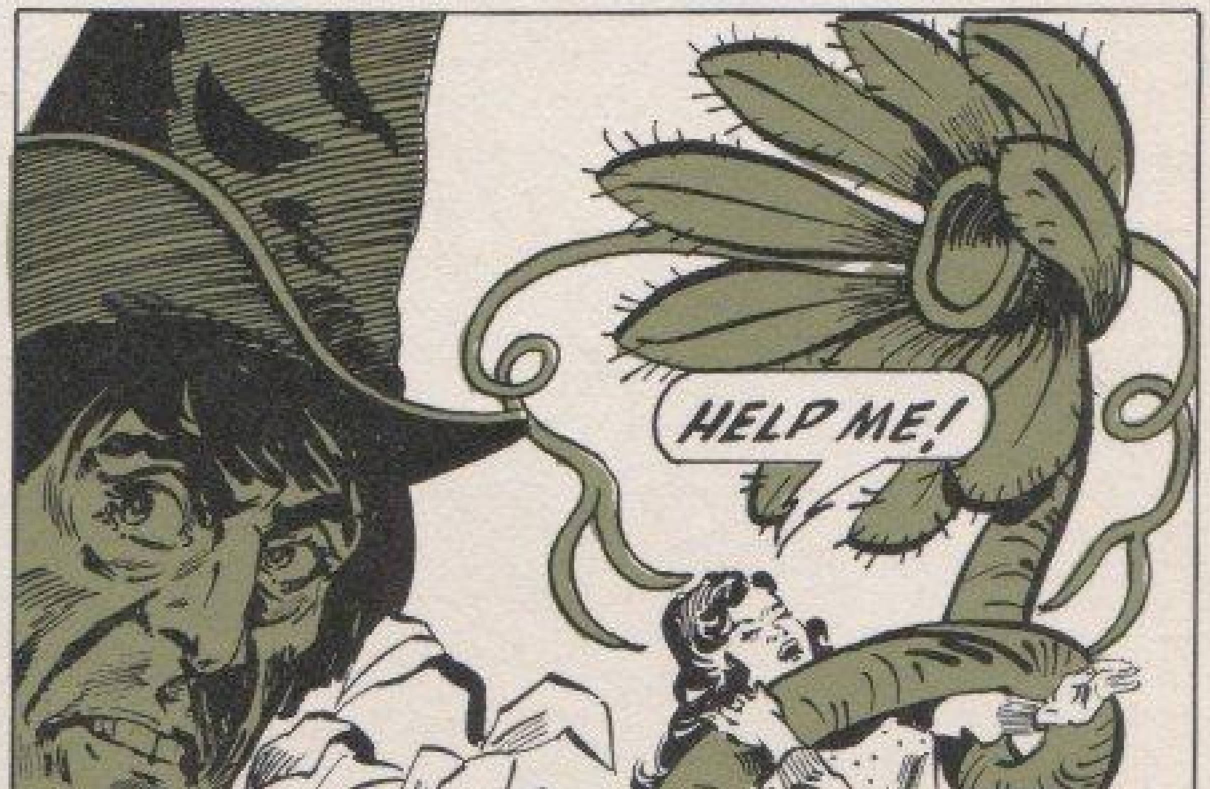


FREEDOM BY FIRE

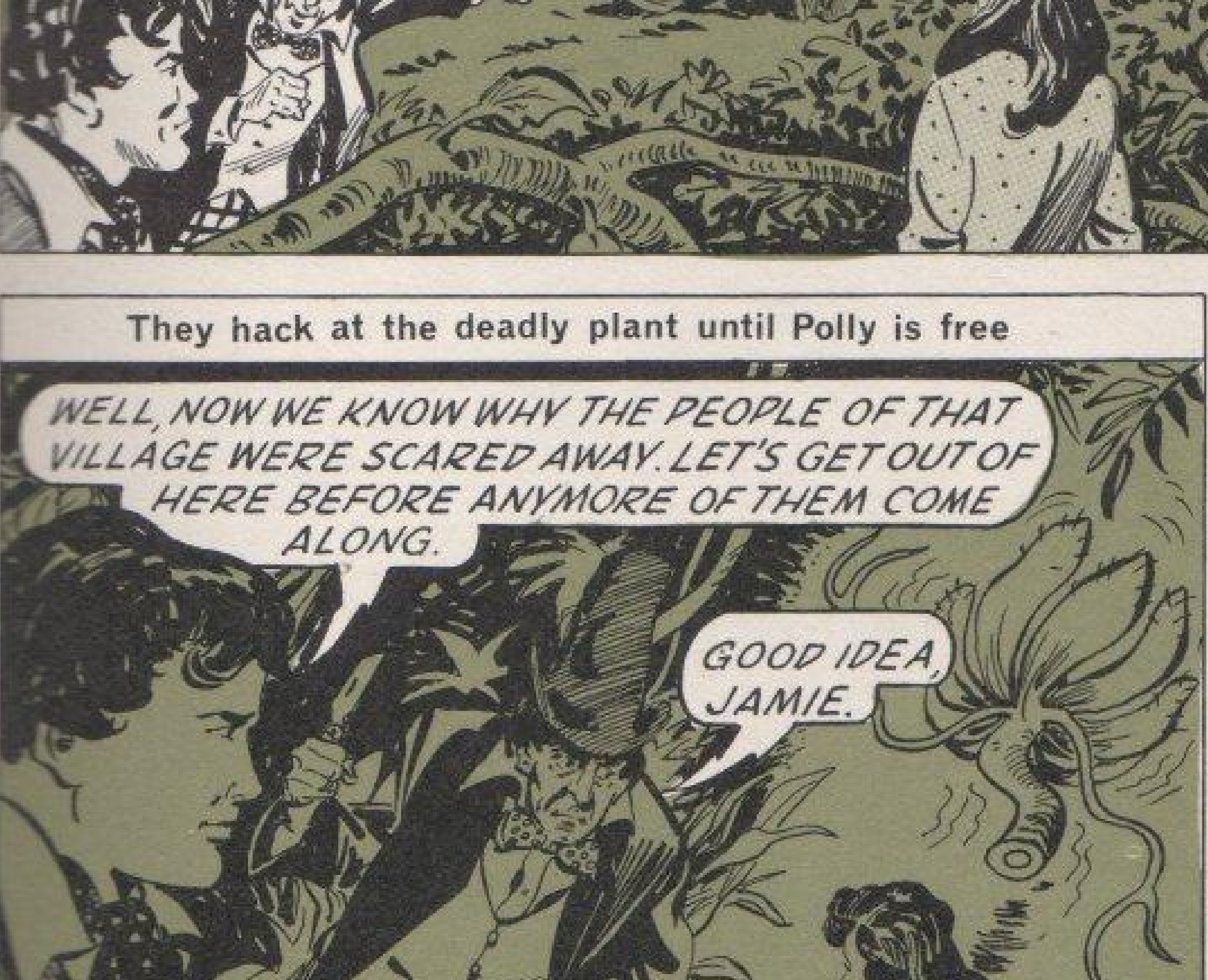

FREEDOM BY FIRE
WHERE ON EARTH HAVE YOU BROUGHT US THIS TIME, DOC?
POLICE BOX
NOWHERE ON EARTH, DEAR BOY. BUT COME, LET'S FOLLOW THAT PATH AND SEE WHERE IT TAKES US.

They stroll through the dense jungle and eventually come to a large clearing

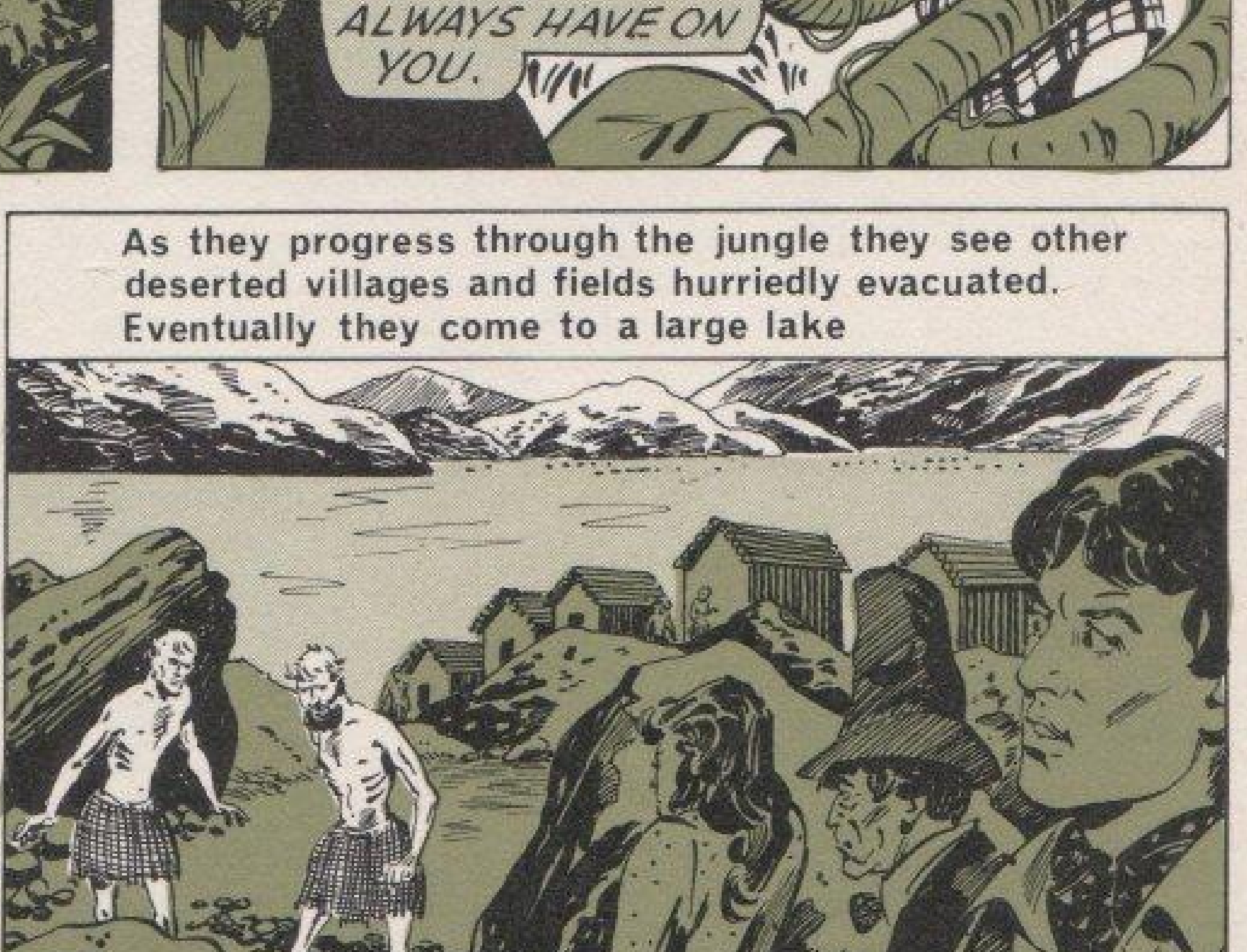

HMM, OBVIOUSLY BELONGING TO A CIVILISED PEOPLE. WONDER WHAT SCARED THEM AWAY?

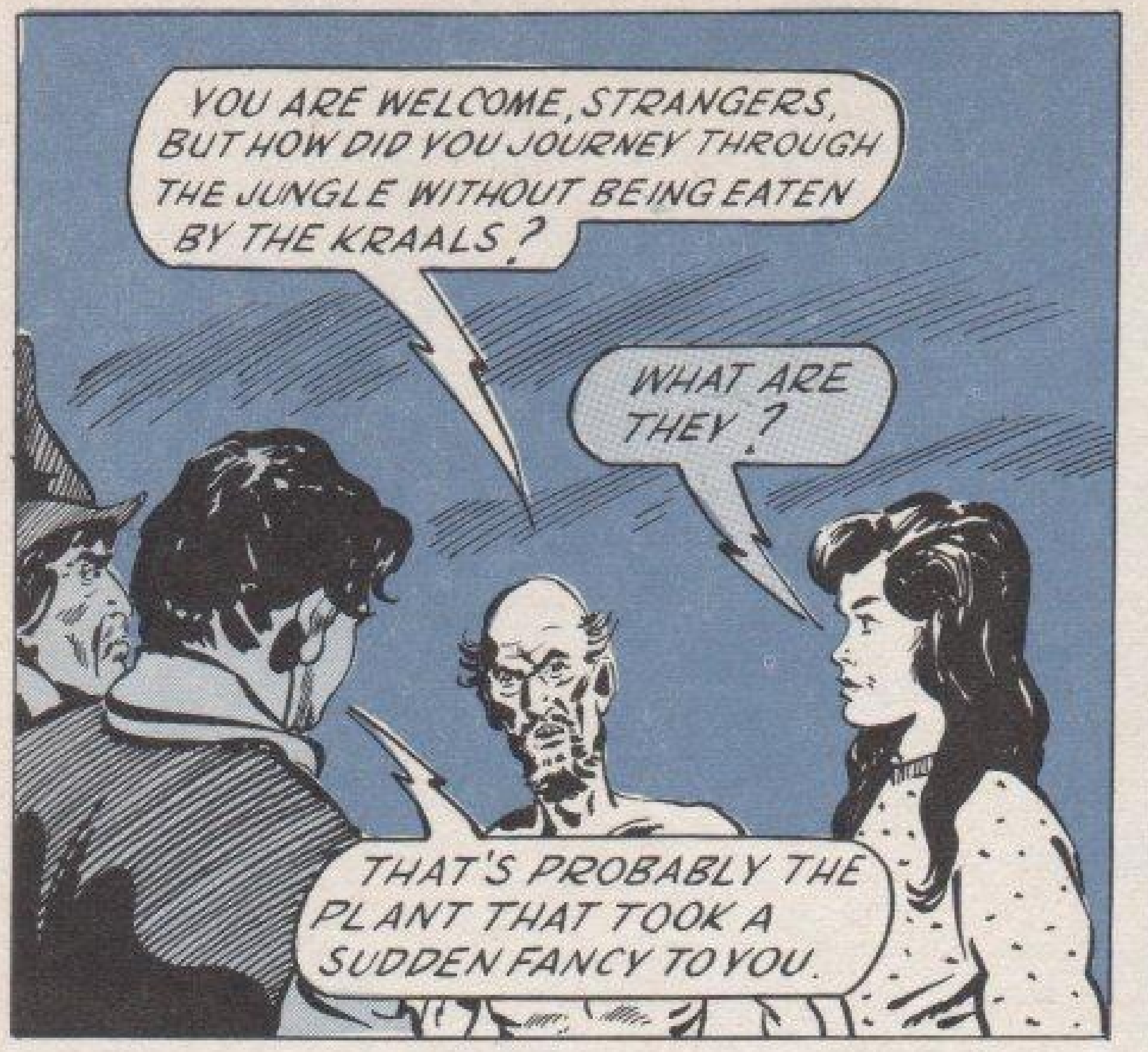

HELP ME!
QUICK, JAMIE, THAT PEN-KNIFE YOU ALWAYS HAVE ON YOU.

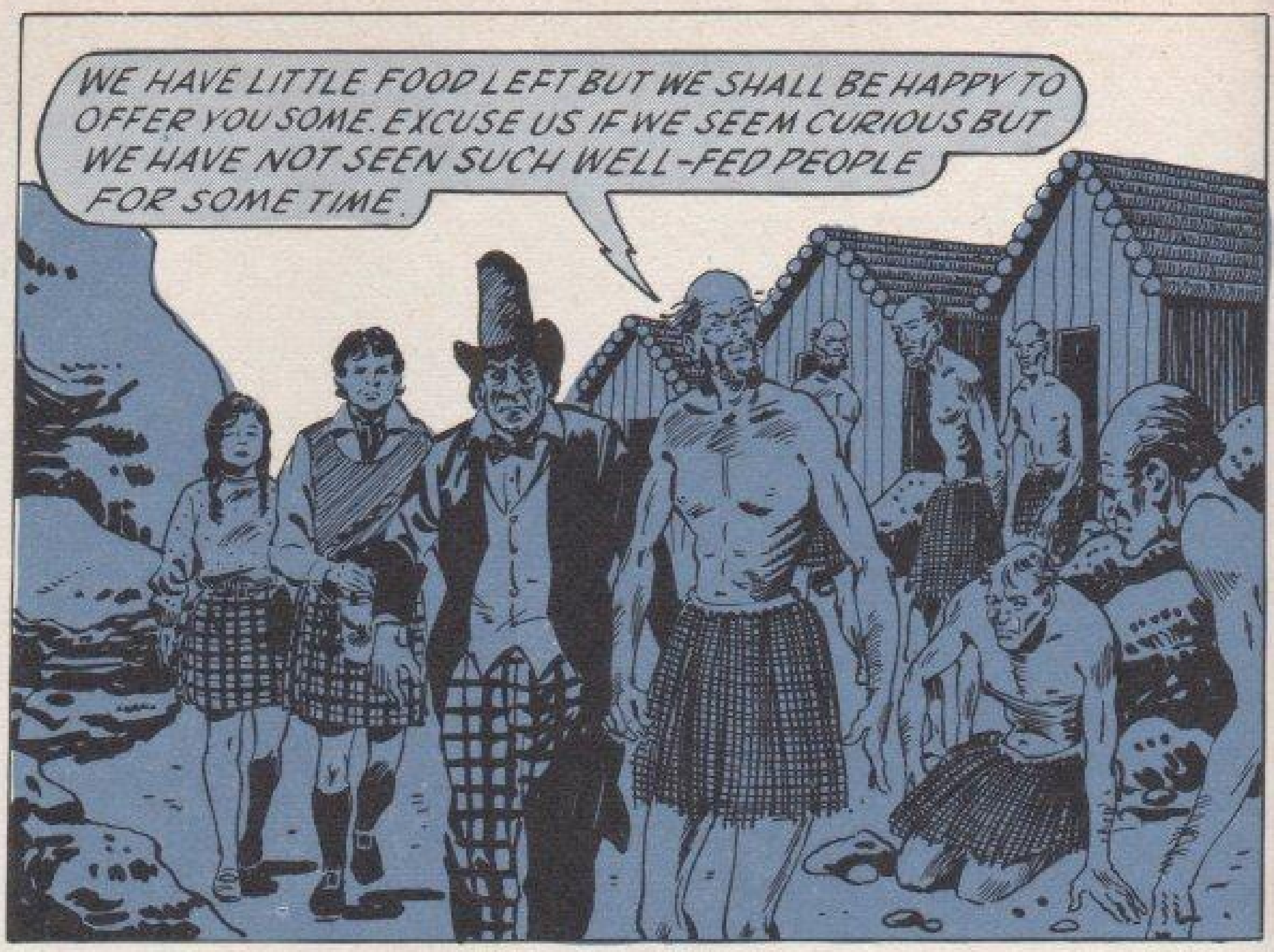
They hack at the deadly plant until Polly is free


WELL, NOW WE KNOW WHY THE PEOPLE OF THAT VILLAGE WERE SCARED AWAY. LET'S GET OUT OF HERE BEFORE ANYMORE OF THEM COME ALONG.
GOOD IDEA, JAMIE.

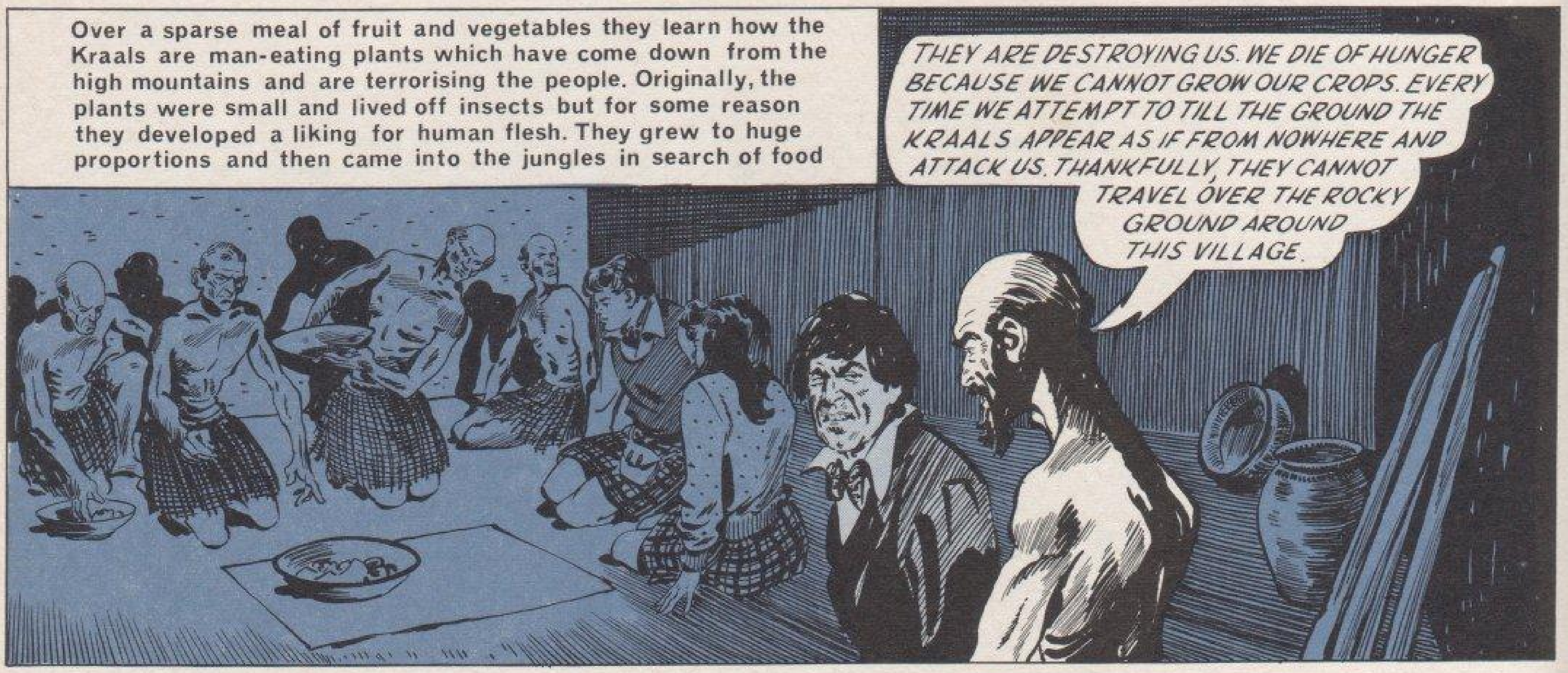
As they progress through the jungle they see other deserted villages and fields hurriedly evacuated. Eventually they come to a large lake

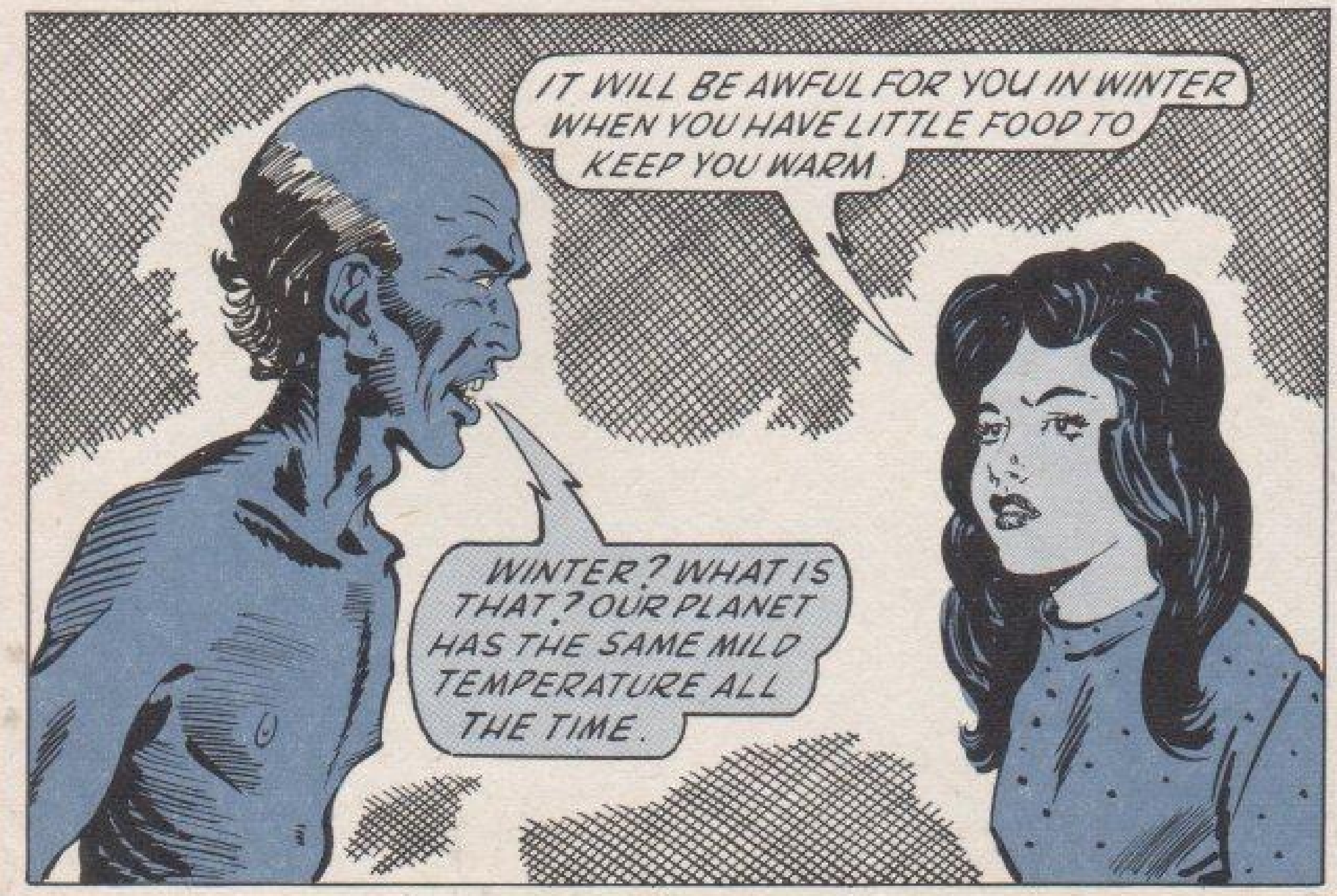


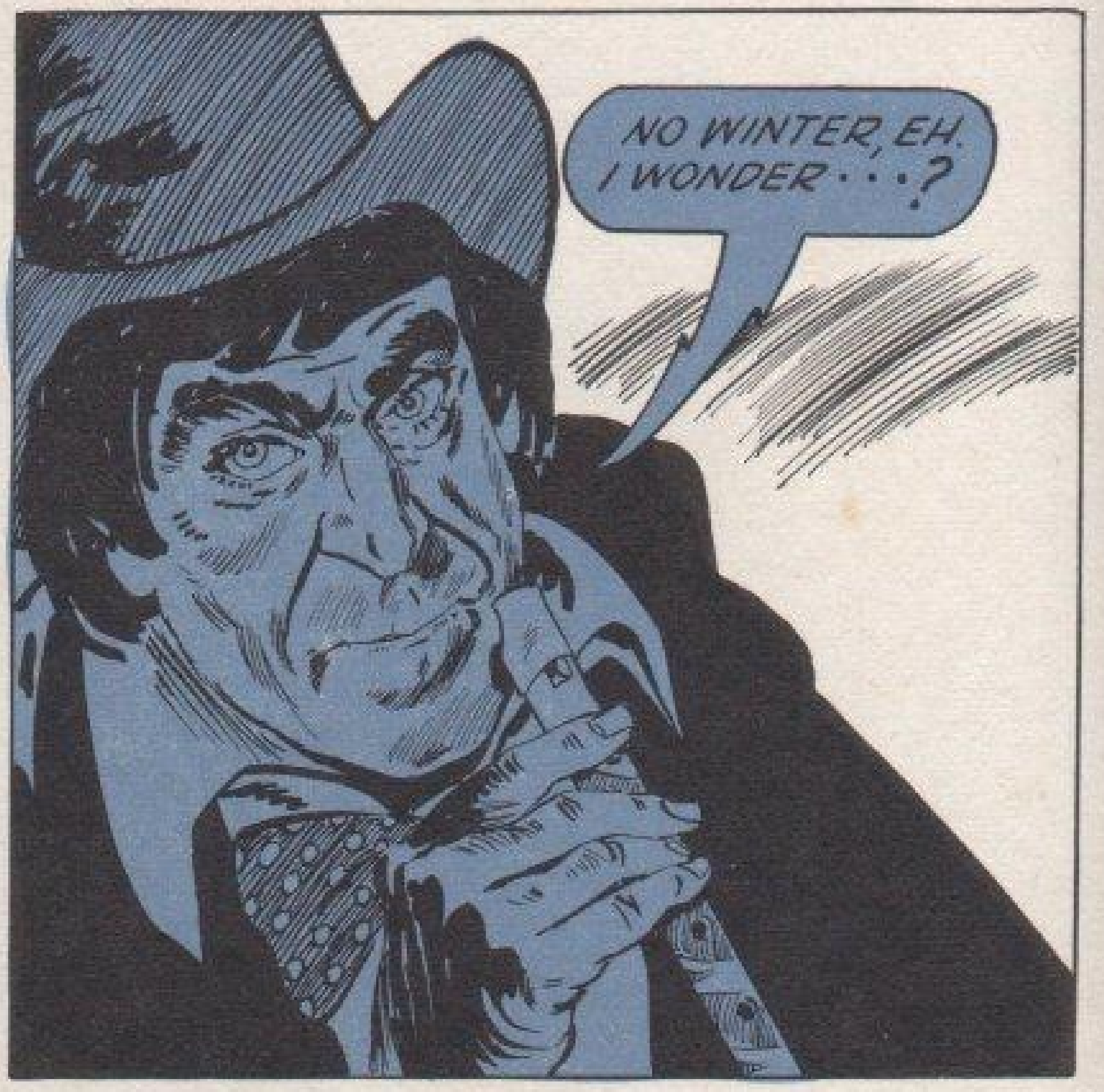

YOU ARE WELCOME, STRANGERS, BUT HOW DID YOU JOURNEY THROUGH THE JUNGLE WITHOUT BEING EATEN BY THE KRAALS?
WHAT ARE THEY?
THAT'S PROBABLY THE PLANT THAT TOOK A SUDDEN FANCY TO YOU.

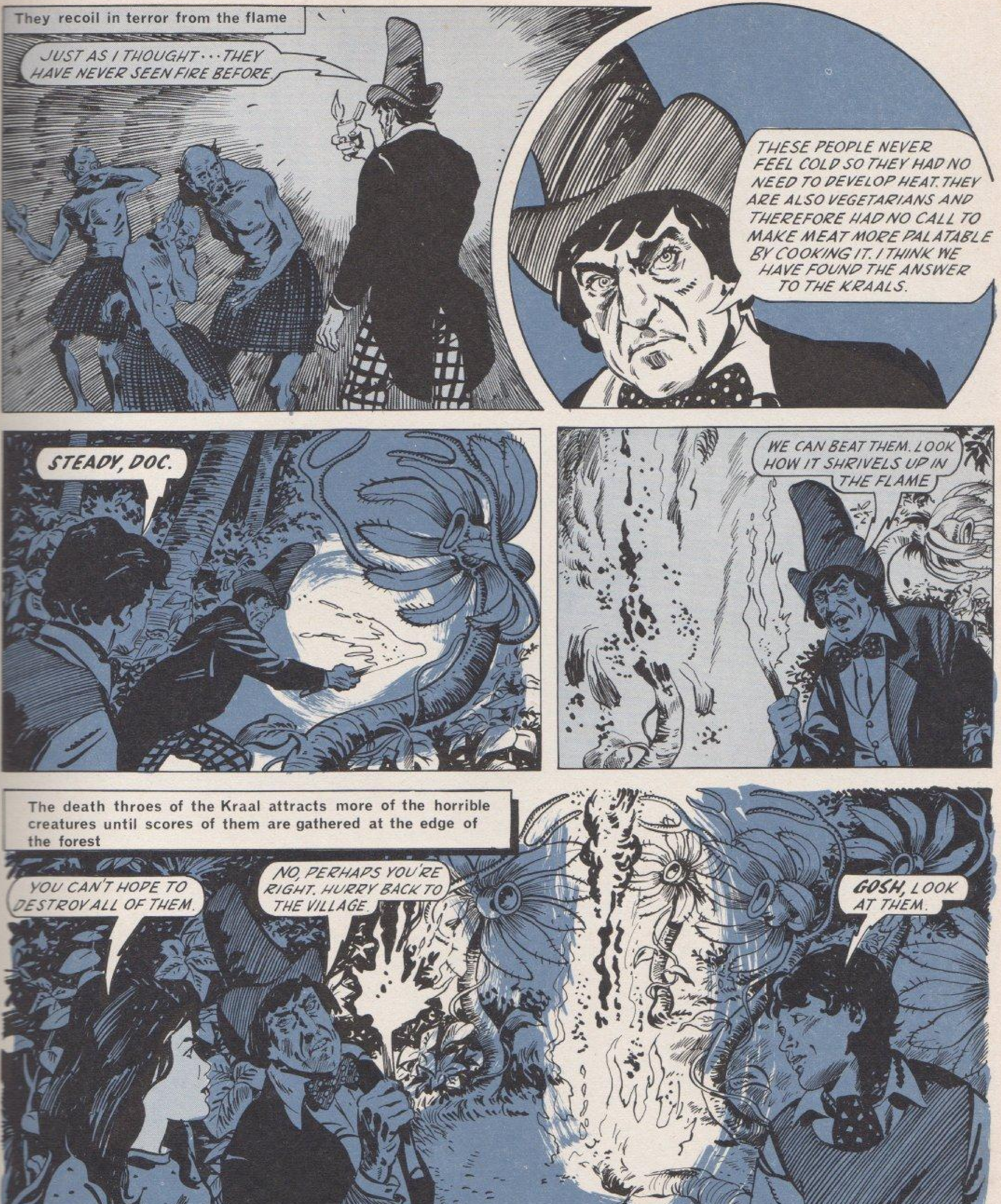

WE HAVE LITTLE FOOD LEFT BUT WE SHALL BE HAPPY TO OFFER YOU SOME. EXCUSE US IF WE SEEM CURIOUS BUT WE HAVE NOT SEEN SUCH WELL-FED PEOPLE FOR SOME TIME.

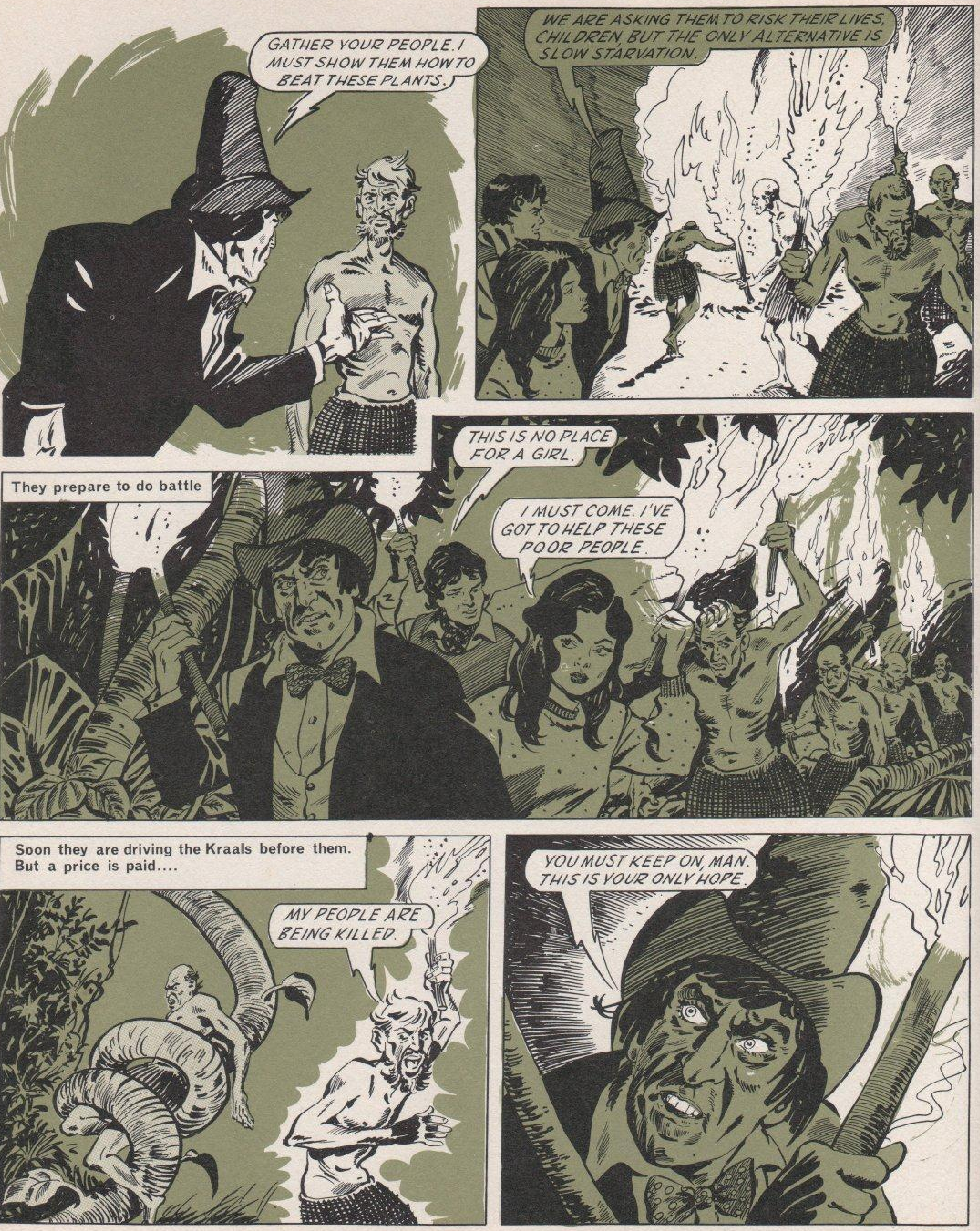
Over a sparse meal of fruit and vegetables they learn how the Kraals are man-eating plants which have come down from the high mountains and are terrorising the people. Originally, the plants were small and lived off insects but for some reason they developed a liking for human flesh. They grew to huge proportions and then came into the jungles in search of food

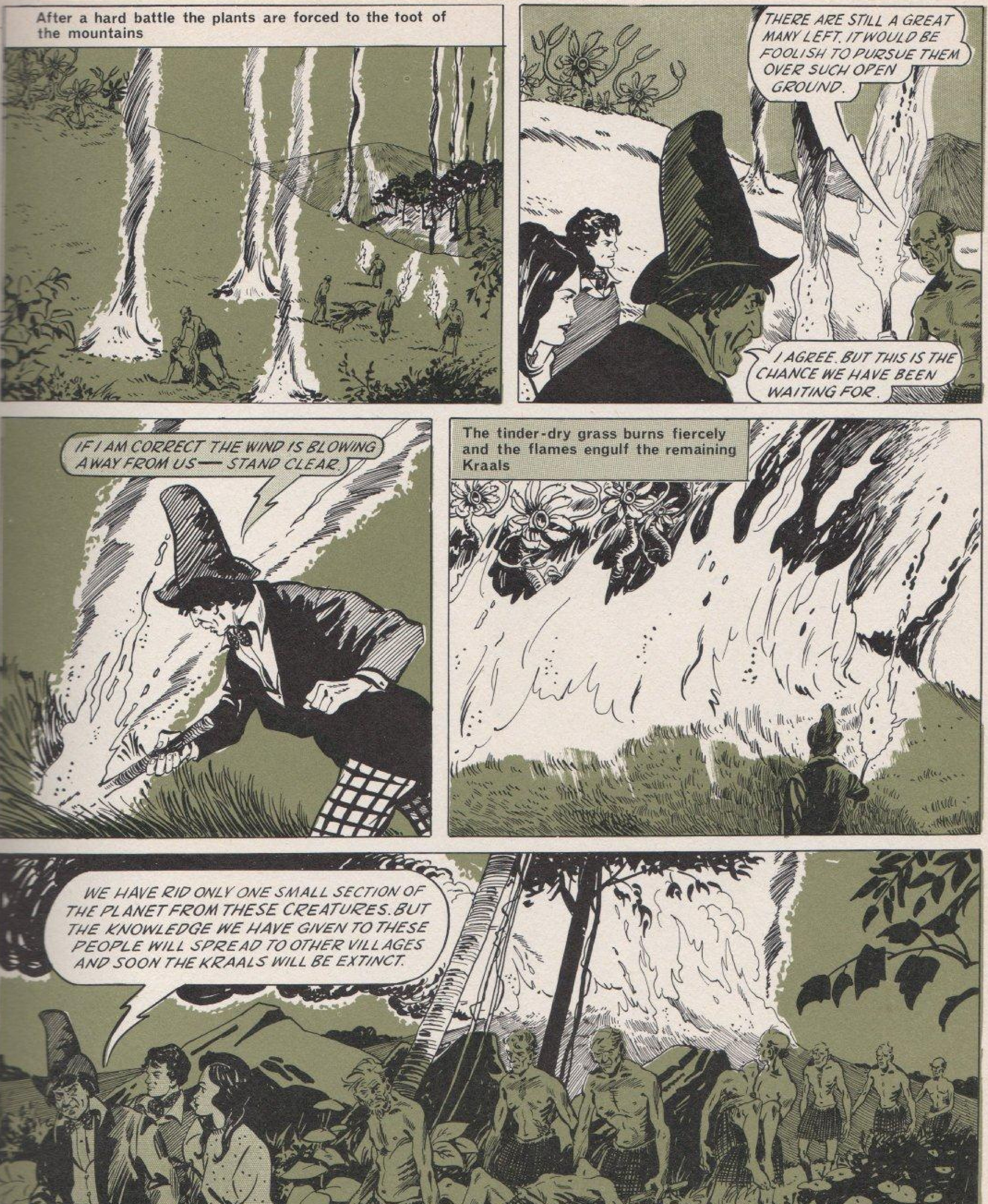

THEY ARE DESTROYING US. WE DIE OF HUNGER BECAUSE WE CANNOT GROW OUR CROPS. EVERY TIME WE ATTEMPT TO TILL THE GROUND THE KRAALS APPEAR AS IF FROM NOWHERE AND ATTACK US. THANKFULLY, THEY CANNOT TRAVEL OVER THE ROCKY GROUND AROUND THIS VILLAGE.

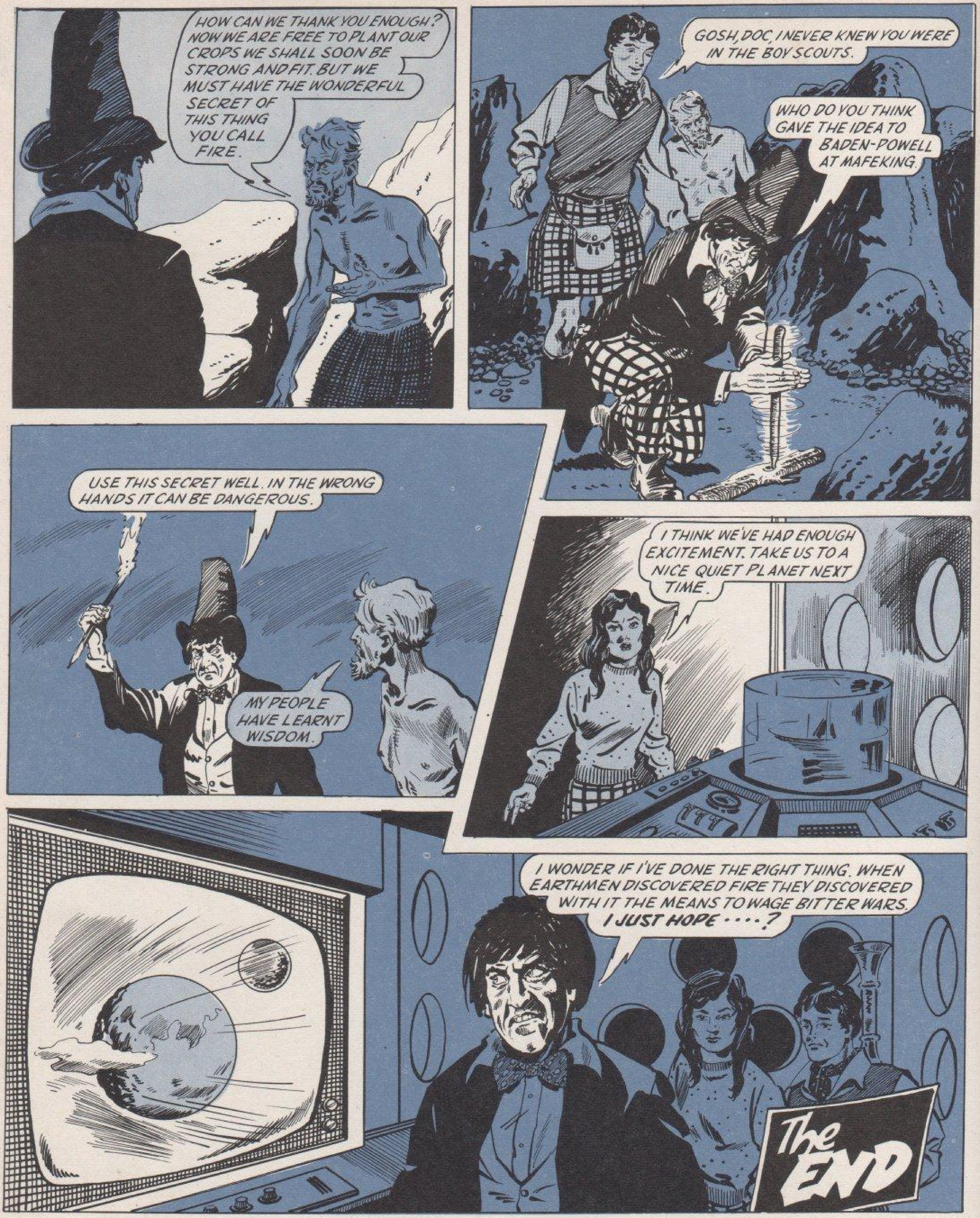

IT WILL BE AWFUL FOR YOU IN WINTER WHEN YOU HAVE LITTLE FOOD TO KEEP YOU WARM.
WINTER? WHAT IS THAT? OUR PLANET HAS THE SAME MILD TEMPERATURE ALL THE TIME.


NO WINTER, EH. I WONDER...?

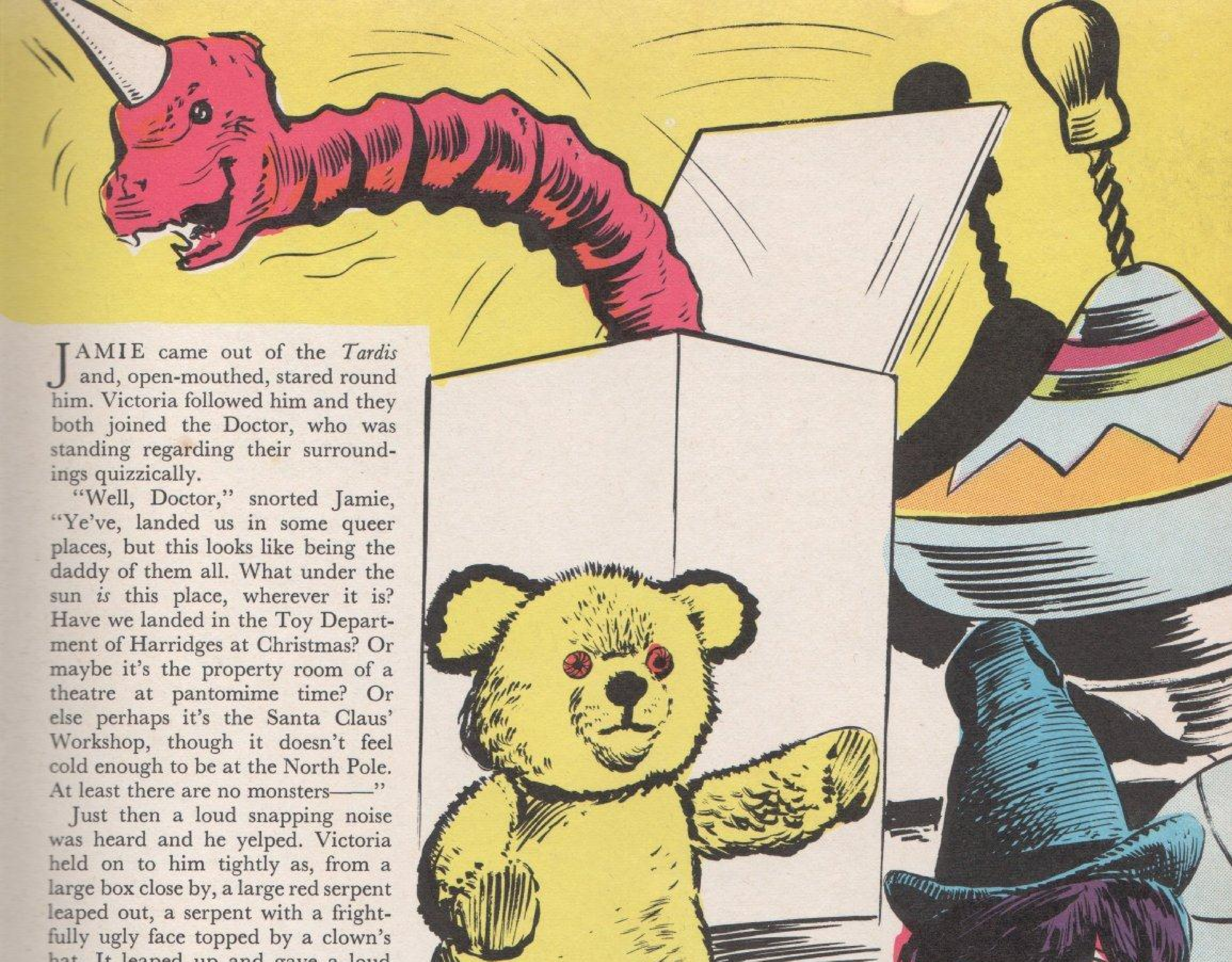

They recoil in terror from the flame
JUST AS I THOUGHT · · · THEY HAVE NEVER SEEN FIRE BEFORE
THESE PEOPLE NEVER FEEL COLD SO THEY HAD NO NEED TO DEVELOP HEAT. THEY ARE ALSO VEGETARIANS AND THEREFORE HAD NO CALL TO MAKE MEAT MORE PALATABLE BY COOKING IT. I THINK WE HAVE FOUND THE ANSWER TO THE KRAALS.
STEADY, DOC.
WE CAN BEAT THEM. LOOK HOW IT SHRIVELS UP IN THE FLAME
The death throes of the Kraal attracts more of the horrible creatures until scores of them are gathered at the edge of the forest
YOU CAN'T HOPE TO DESTROY ALL OF THEM.
NO, PERHAPS YOU'RE RIGHT. HURRY BACK TO THE VILLAGE.
GOSH, LOOK AT THEM.


GATHER YOUR PEOPLE. I MUST SHOW THEM HOW TO BEAT THESE PLANTS.
WE ARE ASKING THEM TO RISK THEIR LIVES, CHILDREN, BUT THE ONLY ALTERNATIVE IS SLOW STARVATION.
They prepare to do battle
THIS IS NO PLACE FOR A GIRL.
I MUST COME. I'VE GOT TO HELP THESE POOR PEOPLE.
Soon they are driving the Kraals before them. But a price is paid....
MY PEOPLE ARE BEING KILLED.
YOU MUST KEEP ON, MAN. THIS IS YOUR ONLY HOPE.


After a hard battle the plants are forced to the toot of the mountains
THERE ARE STILL A GREAT MANY LEFT. IT WOULD BE FOOLISH TO PURSUE THEM OVER SUCH OPEN GROUND.
I AGREE. BUT THIS IS THE CHANCE WE HAVE BEEN WAITING FOR.
IF I AM CORRECT THE WIND IS BLOWING AWAY FROM US— STAND CLEAR.
The tinder-dry grass burns fiercely and the flames engulf the remaining Kraals
WE HAVE RID ONLY ONE SMALL SECTION OF THE PLANET FROM THESE CREATURES. BUT THE KNOWLEDGE WE HAVE GIVEN TO THESE PEOPLE WILL SPREAD TO OTHER VILLAGES AND SOON THE KRAALS WILL BE EXTINCT.


HOW CAN WE THANK YOU ENOUGH? NOW WE ARE FREE TO PLANT OUR CROPS WE SHALL SOON BE STRONG AND FIT. BUT WE MUST HAVE THE WONDERFUL SECRET OF THIS THING YOU CALL FIRE.
GOSH, DOC, I NEVER KNEW YOU WERE IN THE BOY SCOUTS.
WHO DO YOU THINK GAVE THE IDEA TO BADEN-POWELL AT MAFEKING.
USE THIS SECRET WELL. IN THE WRONG HANDS IT CAN BE DANGEROUS.
MY PEOPLE HAVE LEARNT WISDOM.
I THINK WE'VE HAD ENOUGH EXCITEMENT. TAKE US TO A NICE QUIET PLANET NEXT TIME.
I WONDER IF I'VE DONE THE RIGHT THING. WHEN EARTHMEN DISCOVERED FIRE THEY DISCOVERED WITH IT THE MEANS TO WAGE BITTER WARS. I JUST HOPE....?
The END

THE CELESTIAL TOY-SHOP



JAMIE came out of the *Tardis* and, open-mouthed, stared round him. Victoria followed him and they both joined the Doctor, who was standing regarding their surroundings quizzically.

"Well, Doctor," snorted Jamie, "Ye've, landed us in some queer places, but this looks like being the daddy of them all. What under the sun *is* this place, wherever it is? Have we landed in the Toy Department of Harridges at Christmas? Or maybe it's the property room of a theatre at pantomime time? Or else perhaps it's the Santa Claus' Workshop, though it doesn't feel cold enough to be at the North Pole. At least there are no monsters——"

Just then a loud snapping noise was heard and he yelped. Victoria held on to him tightly as, from a large box close by, a large red serpent leaped out, a serpent with a frightfully ugly face topped by a clown's hat. It leaped up and gave a loud rattling "brrrr", then fell limply over the edge of the box. Dr. Who uttered a loud braying laugh at Jamie's dismay.

"You've hit the nail right on the head, Jamie, my boy," he chuckled. "This *is* a toy-shop, of that there can be no possible doubt. A little on the formidable side, I'll admit. That Jack-in-the-Box must be ten feet high and its box is as big as a garage. This is all most interesting. I look forward to some very curious experiments here, wherever it is."

"Oh, look at those pretty dolls," cried Victoria. "But how big they are! They must be six feet high. Who'd ever think of a six-foot doll?"

"Someone did," muttered Jamie. "Or some *thing*," he added darkly.

"Children," laughed the Doctor. "Perhaps it's a *magic* toy-shop. There's room for magic in an infinite universe, you know. I'm in the mood for magic. Let's explore this place. It's a place to *play* in, children. Positively fascinating, upon my word, positively fascinating. Who knows what we might find. Can't you feel the sheer *happiness* all round? I feel like a boy again, a boy on Christmas morning, eager to see what Father Christmas has brought him."

It seemed as though the particular "Father Christmas" who owned this remarkable toy-shop had provided just about everything the heart of any child—or any grown-up—could desire. There was a toy railway, almost big enough for the Doctor to squat in the coal-tender. It had taken the united strength of all three of them to turn the massive key which set the clockwork going and then it only went a few yards on its track and then whirred to stillness. But by then their eager attention had turned to something else.

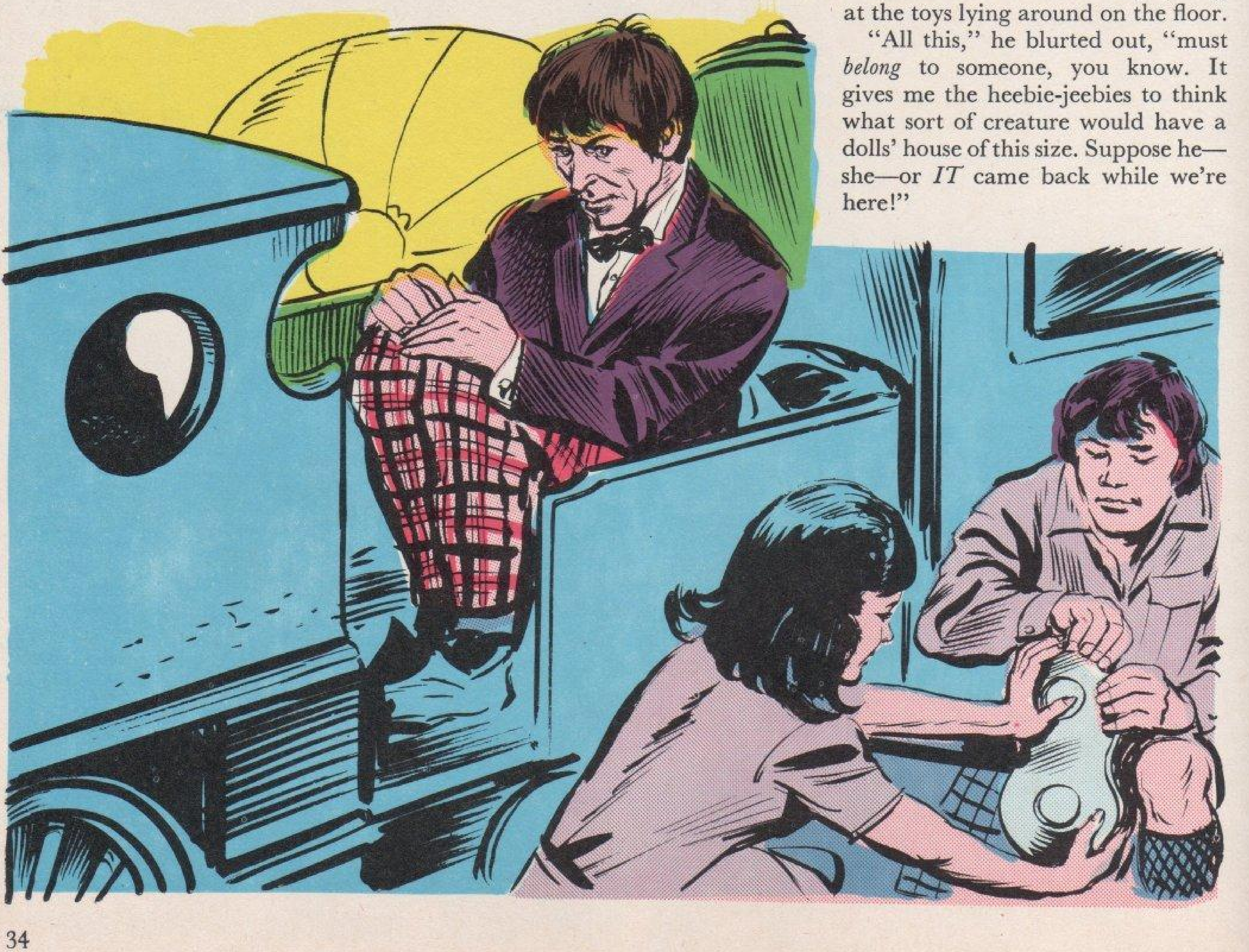
There was an enormous vividly coloured spinning-top, far too big for them to spin, and a long box of toy soldiers, each about four feet tall, with tin muskets and vivid red blobs of paint on their fat cheeks. There were sets of metal erector toys, and as the Doctor saw at once, the sets had been *used*! Models stood half-finished on the floor! He scratched his head. This was a fine puzzle. A toy-shop in the middle of infinite Space, large enough for a very large child, and all fresh and new, just as if it had been used only a short time ago.

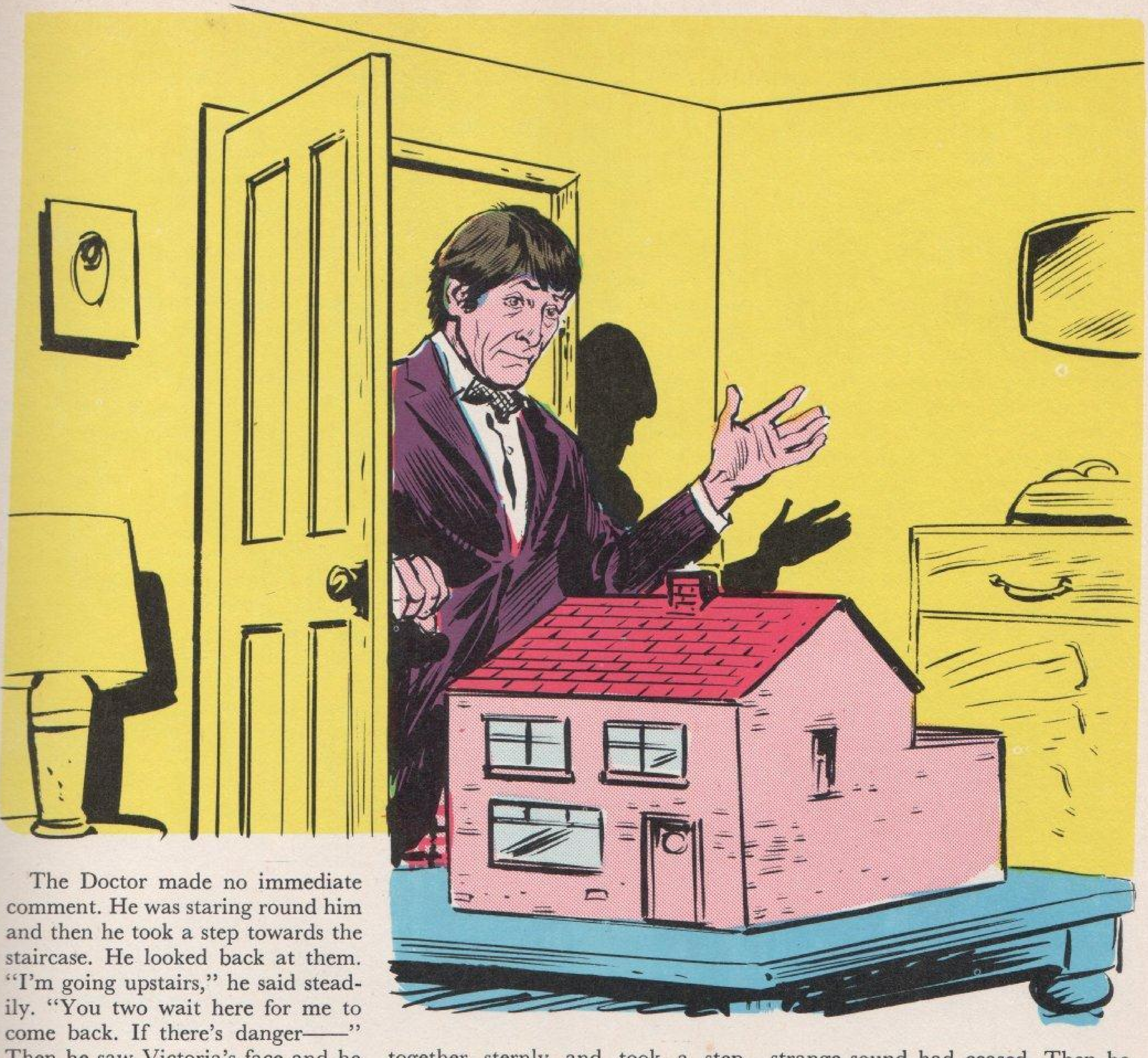
Victoria gave a tiny scream before she realised that the enormous bear was only, after all, a cuddly teddy bear, while Jamie was entranced by a huge box containing a junior chemical outfit, with apparatus almost large enough for a grown-up experimenter. But the best thing of all was the dolls' house! Now that was a beauty and no mistake, the Doctor thought, as he stood on the strip of green paint that represented grass in front of the door.

"It's big enough to go into," cried Victoria in delight. "Oh, can we go in? I always used to long to be able to go into my dolls' house when I was a little girl. It used to look so cosy and homely inside there, while I used to feel so big and clumsy and awkward outside, peering in through the tiny windows. Can we go inside, Doctor? Oh, do say we can!"

"I don't see any harm in that," smiled the Doctor, and he put out a hand and opened the door. Jamie and Victoria went through easily but he had to stoop a little. They stood inside and looked around. They were in a living-room and in the chairs were sitting life-size dolls. There was Father and Mother and a girl and a boy. They sat immobile in their chairs with those insipid smiles that all dolls wear. Victoria shivered a little and Jamie shifted from one foot to the other, staring at the toys lying around on the floor.

"All this," he blurted out, "must *belong* to someone, you know. It gives me the heebie-jeebies to think what sort of creature would have a dolls' house of this size. Suppose he—she—or *IT* came back while we're here!"





The Doctor made no immediate comment. He was staring round him and then he took a step towards the staircase. He looked back at them. "I'm going upstairs," he said steadily. "You two wait here for me to come back. If there's danger——" Then he saw Victoria's face and he stopped.

Upstairs there was a small landing and a room at either side. He took the right-hand door and went inside. What he saw rooted him to the floor. On a table stood a replica of the house they were now inside. The original dolls' house seemed, by now, as big as any normal house, and this small model was a true dolls' house. As far as he could recall, it was an exact replica. Scattered round the room were other children's toys, of the correct size this time and not so huge and daunting. The atmosphere was dream-like and the Doctor felt a wave of drowsiness creep over him. He pulled himself together sternly and took a step towards the table. But the table was gone and the front door of the house looked very welcoming. He took hold of the knob and went inside. Had he dreamed all this or was it really happening?

As he went through the door he thought he heard a strange sound, dry and crackling, like something huge and scaly crawling along the floor. The sound came from outside, from the room above where Victoria and Jamie were waiting for him. He spun round and took hold of the knob. It would not move and by no effort could he open the door. He put his ear to the door and listened. He could hear nothing at first: the strange sound had ceased. Then he heard Jamie's voice and his heart rose. They were safe and all right. It was his own imagination, that strange sound. He was in such a curious frame of mind that he couldn't tell whether he was dreaming or not.

Some sixth sense told him what to expect now and yet when it came, the hair rose on his neck and he stood frozen in his tracks. This time the new dolls' house stood on the floor of the downstairs living-room. Here, like the others, were dolls sitting in chairs staring vacantly through painted eyes. The house was again an exact replica of the others—how many were there now?

The one he went into with the children. Then one inside that and now this one. Had he missed one? This was truly fantastic and could only be explained by a strange theory he had long clung to. How was he to prove that theory?

He never gave a thought as to how he was able to walk into the houses, even though each was *inside* the last. It happened that way and he took it for granted. He was now certain he was in a dream, but it was a pleasant, jolly sort of dream and he wasn't anxious to wake up.

Inside this house it was subtly different. The dolls in the chairs were there but they looked different this time. There was a *wrongness* about the expressions on their china faces that made him shudder. He could almost fancy these dolls could move—were alive! In fact, when he turned his head, he fancied that, from the corner of one eye, he saw one of them move. Turning his head quickly, he decided it was his fancy. By now, he had quite lost count of the number of dolls' houses inside each other which he had penetrated.

In this house there were also sounds. Creakings and whistlings, as though timbers were settling, and draughts were coming through slits in windowsills. And, from far away came a sound almost like a laugh. But it was also like distant thunder, and impulsively he turned back towards the door to go back. But his insatiable curiosity, that curiosity that had lured him round half the cosmos in his hunger to find out, to know, and to experience all of infinity, stopped him. There would be yet another dolls' house inside this one if his theory was correct.

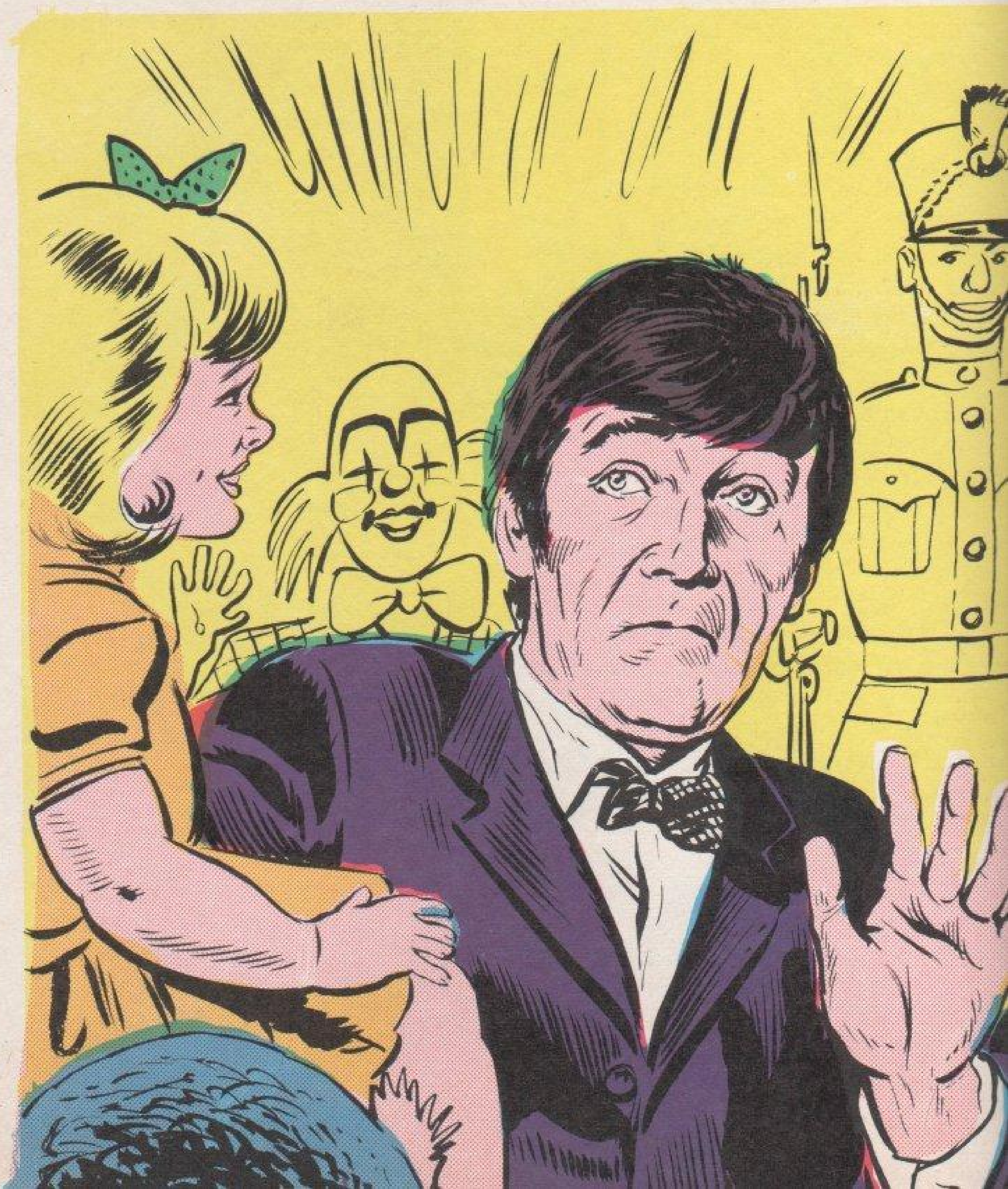
The house was again in the upstairs room and when he came to it he heard a sound again, not this time the slithering sound of scales on the floor or the creaking and whistling natural to a house of wood, but a sound like knocking. It seemed to come from all round him and from nowhere in particular. It kept on with insistent monotony until he was driven half-crazy by it and when he saw the dolls' house this time, he did not hesitate but plunged through the door eagerly—anything, anything at all to get away from that knocking.

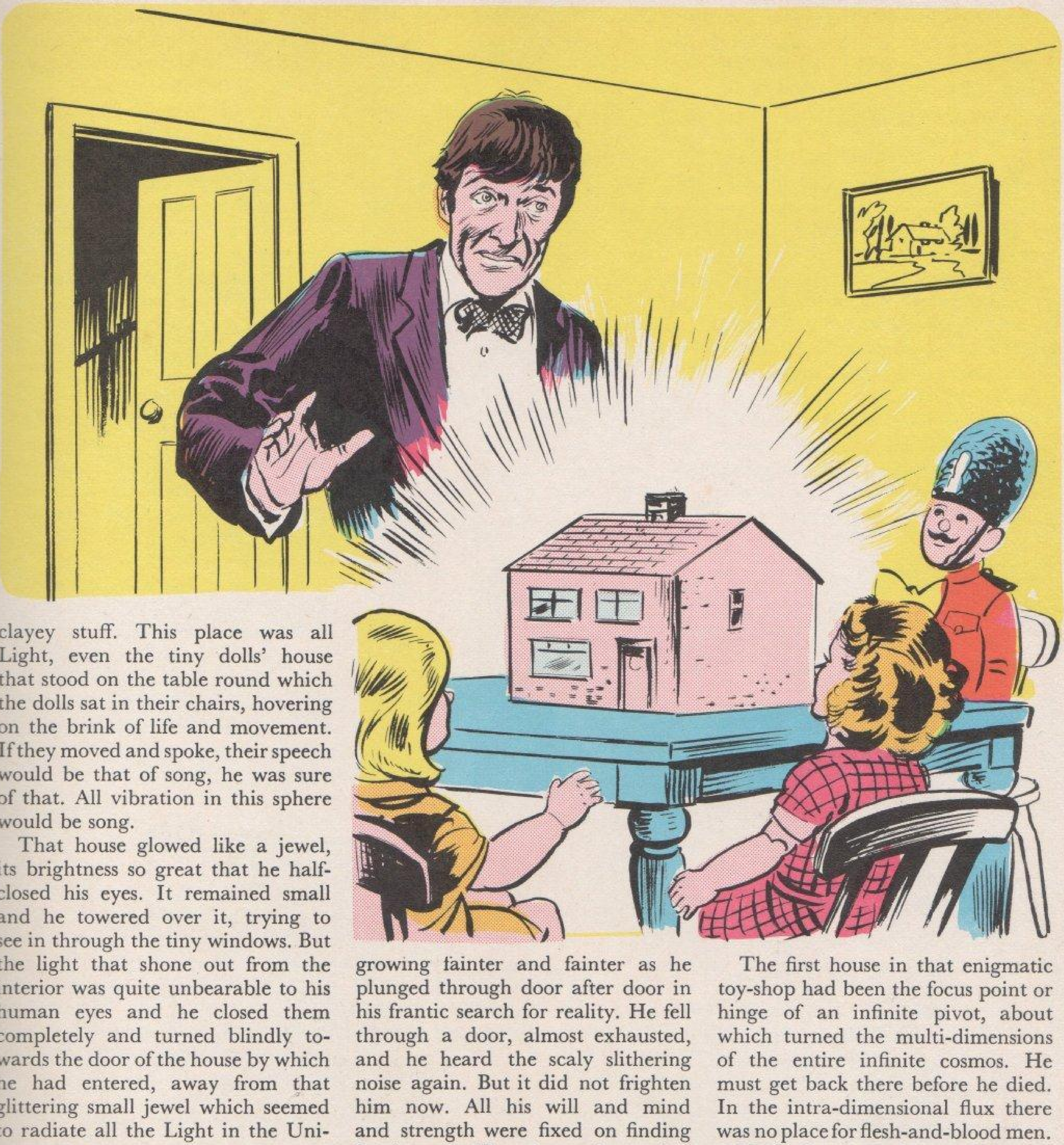
Now he was in a different atmosphere altogether. That ecstatic feeling of true happiness returned, now a thousand-fold. The light was very brilliant now, and the dolls in their chairs looked even more lifelike. That haunting impression that they were moving or just about to move, was very strong. He craved for the courage to go over to one of the figures and actually touch it. But he knew that never would he dare to do that.

The light all around and inside the house was a flood of glory and now he heard again that strange sound like a distant mighty laughter. Now it was like the laughing voices of children playing. There were no words, just the happy laughter, the sound of pure joy. But, if creatures were making the sounds, where were they? *What* were they? The sounds seemed to be all round him and yet inside him also. This place radiated active happiness, serenity, contentment, peace—like no other spot in the universe.

The dolls' house this time was on the floor at his feet and he stood over it and the dream deepened and his spirit wavered. The door came up and the knob seemed to insinuate itself into his hand. He twisted it and the door opened. His eyes half-closed instinctively at the radiant light that filled that tiny house in which he, a full-grown man, stood, his heart filled with wonder.

There were no sounds here, no actual physical sounds that would affect his eardrums. Yet there were thought-impressions, so vague and so magical to his earthbound spirit that by no chance could he interpret them. This was a place of infinite wonder but it was no place for him. He felt gross and mechanical. His joints seemed to creak and his flesh seemed to be made of some base





clayey stuff. This place was all Light, even the tiny dolls' house that stood on the table round which the dolls sat in their chairs, hovering on the brink of life and movement. If they moved and spoke, their speech would be that of song, he was sure of that. All vibration in this sphere would be song.

That house glowed like a jewel, its brightness so great that he half-closed his eyes. It remained small and he towered over it, trying to see in through the tiny windows. But the light that shone out from the interior was quite unbearable to his human eyes and he closed them completely and turned blindly towards the door of the house by which he had entered, away from that glittering small jewel which seemed to radiate all the Light in the Universe.

He dared not look behind and the door seemed to stick, and he put forward all his strength. An influence from behind him seemed to be restraining him and, like a maniac, he pulled and tugged. He fell out of that house with a groan and saw in front of him another door. Through this he plunged and came on to a landing. The sounds of faraway singing and laughter followed him, growing fainter and fainter as he plunged through door after door in his frantic search for reality. He fell through a door, almost exhausted, and he heard the scaly slithering noise again. But it did not frighten him now. All his will and mind and strength were fixed on finding Jamie and Victoria again, seeing their faces and hearing again their fond, familiar voices.

He had lost all reckoning of how many of the interlocking houses he had gone into and from which he was now escaping. In his search for the first of the dolls' houses, in his own universe, he was plunging through the multi-dimensions of Space and Time, without a thought but the search for *reality*.

The first house in that enigmatic toy-shop had been the focus point or hinge of an infinite pivot, about which turned the multi-dimensions of the entire infinite cosmos. He must get back there before he died. In the intra-dimensional flux there was no place for flesh-and-blood men.

He had seen no loathsome monsters and no intellectual super-creatures. All he had seen were dolls' houses and toys. He had heard strange, but quite identifiable noises, and he had seen Light—yes, that was it, the Light! It had drawn him and he had retreated. No human could face that Light!

He was shaken and sweating now, for random thoughts swept through his mind as he tore up and down the staircases of those interlinked houses. When he found the children they might be *old*, ancient and not remembering him at all. They might be dead and gone for ever. They might still be waiting to be born. If he was truly in an intra-dimensional flux, heaven alone knew at what point in Space and at what moment in Time, he would emerge, if indeed he did emerge.

His mind was numb and wretched. He was torn into two creatures. One of them yearned to go back and wander through the multi-dimensions to see what wonders lay invisible and unheard all around him. But Fear, raw, naked Fear, swept him back to see and hear and feel the comforts of the known and the familiar world. His strong spirit was not strong enough for that ineffable Light.

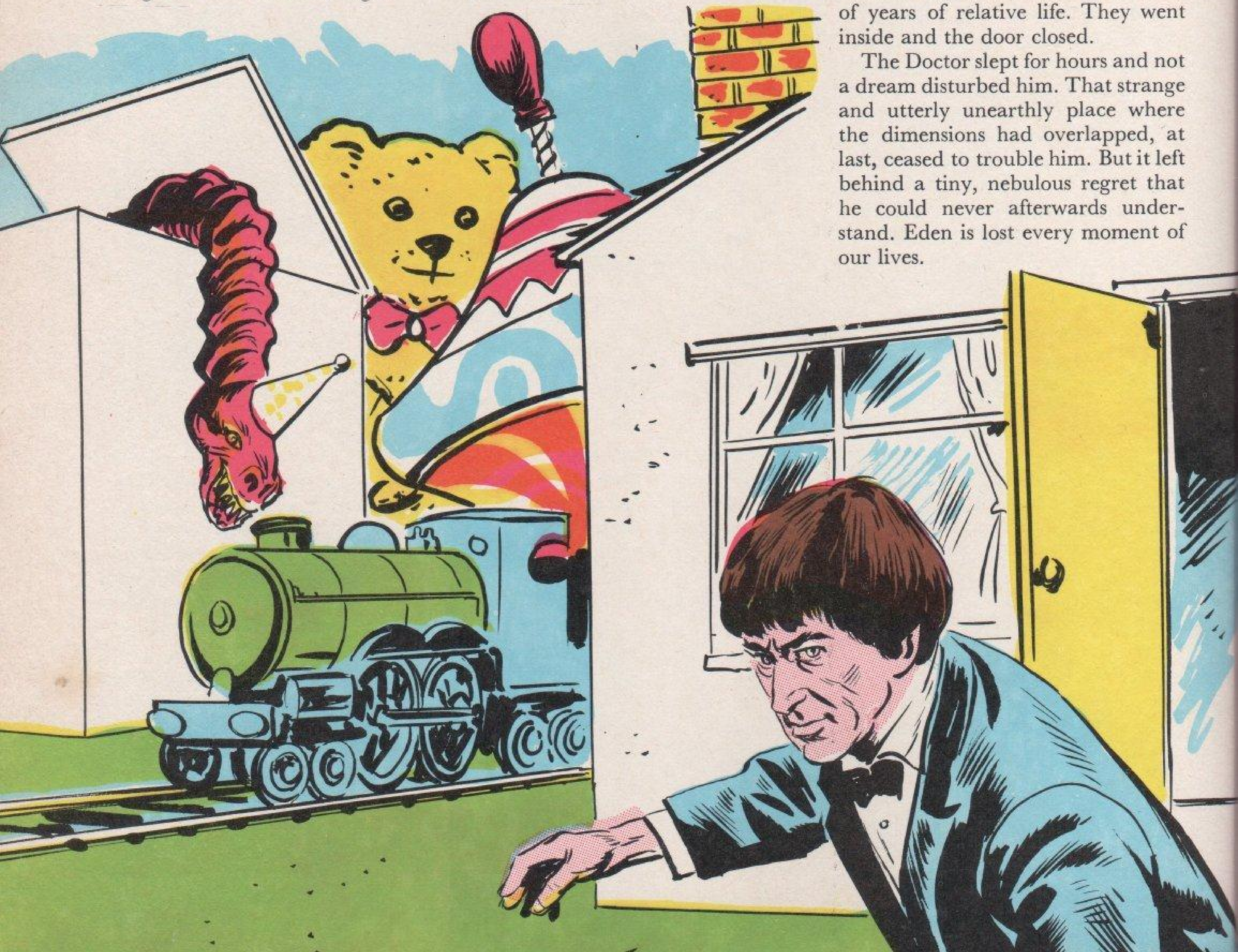
He burst out through an open door on to a green-painted floor and he stared round him wildly. He saw the toy train on its track where the clockwork had given out. He saw the great grotesque head of the Jack-in-the-Box lolling over the edge of its box. But he saw no Jamie and no Victoria! Yet this was the starting point in that strange unearthly journey down through the dimensions. Or had it been *up* through the dimensions? When you thought of multi-dimensions, relative space had no longer a meaning.

He was sobbing miserably when he heard the sound of music. They were playing with a toy dulcimer and Jamie had the hammer raised to hit the note. The Doctor fell into Victoria's arms and she looked at him amazed.

"Doctor, Doctor!" she cried. "You look frightful. Wherever have you been and what has happened? You're ill! When you didn't come back we were a bit worried, but when you didn't call we thought you were all right and we came out of that funny house and left the door open for you. What happened?"

"Nothing has happened, child," he muttered thickly. "Nothing, and yet again, maybe *everything* has happened." He peered into their faces and he touched their cheeks and their hands and glorified in their warmth. Gradually, peace returned to him, and without looking back at the door from which he had emerged, he led them back to the *Tardis*, which stood there as solid and substantial as ever despite its millions of miles of journeys and its millions of years of relative life. They went inside and the door closed.

The Doctor slept for hours and not a dream disturbed him. That strange and utterly unearthly place where the dimensions had overlapped, at last, ceased to trouble him. But it left behind a tiny, nebulous regret that he could never afterwards understand. Eden is lost every moment of our lives.

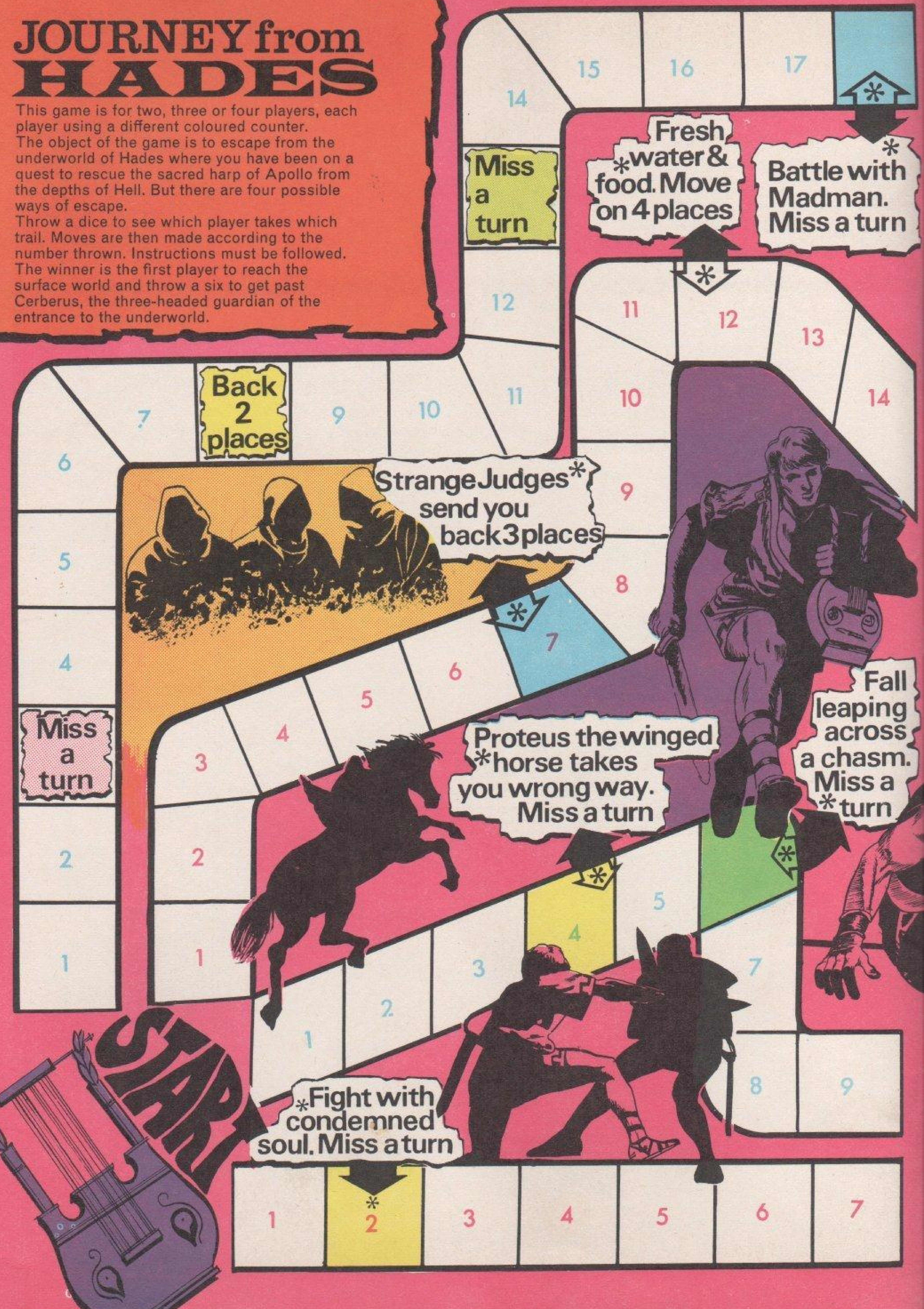


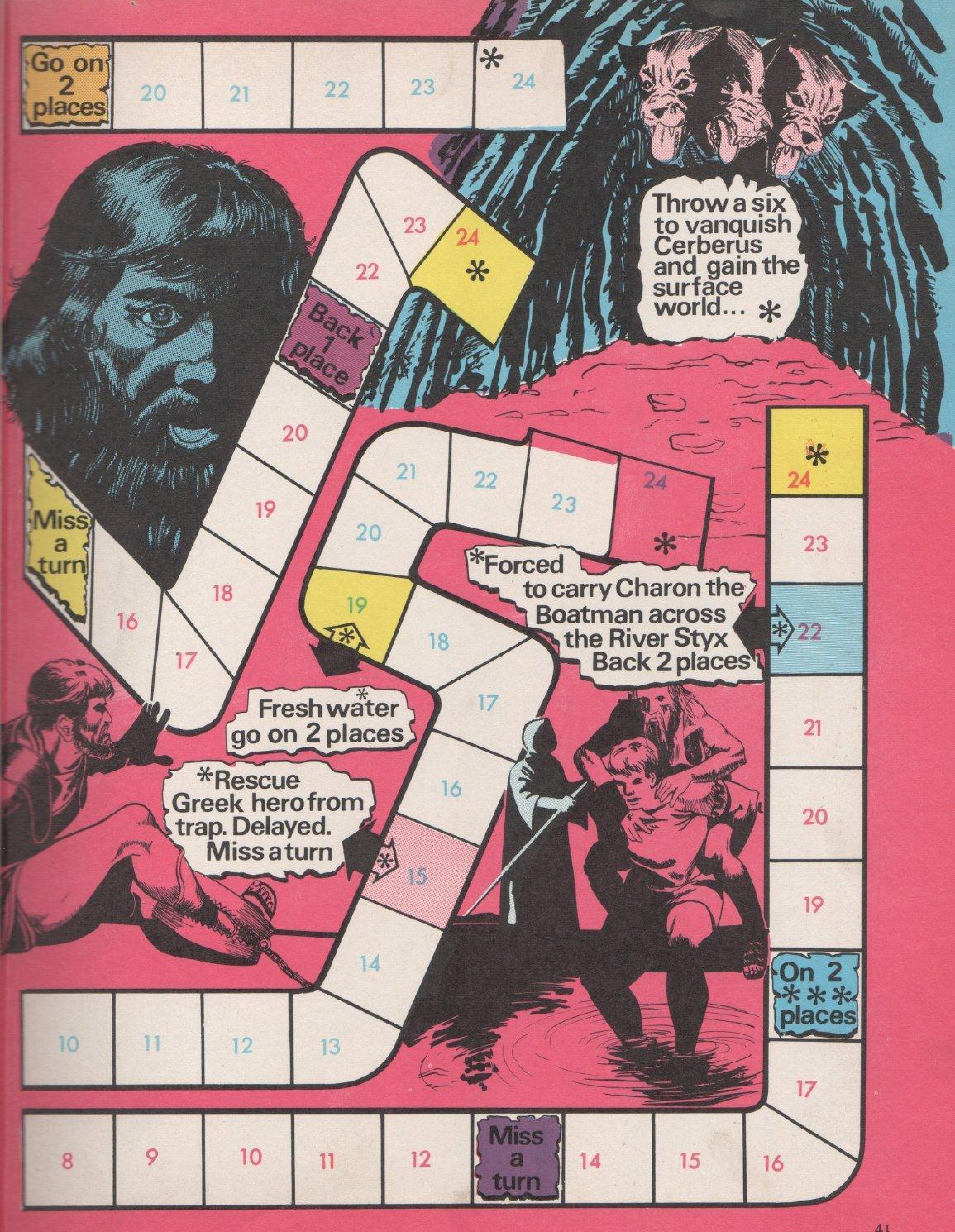
SPACE DICTIONARY

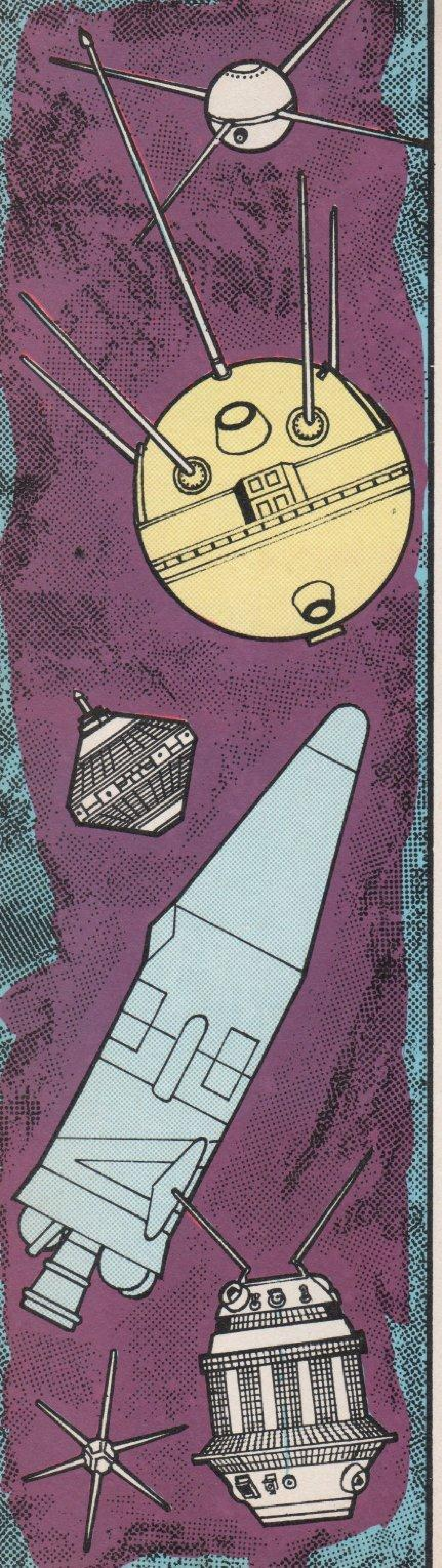
Asteroid:	a very small planet, possibly circling a larger one.
Aurora:	the rosy tint in the sky before the sun rises.
Booster:	a stage of a rocket which helps to put a space vehicle in orbit.
Count-down:	the final stages before blast-off when every sequence is checked.
Cosmic rays:	radiations of great penetrating power, coming to Earth from outer space.
G-force:	a force an ascending rocket exerts on its crew, many times the force of gravity.
Ionosphere:	layer of ionised molecules in the upper atmosphere.
Milky Way:	a galaxy which shines with the light of innumerable stars.
Retro-rocket:	a rocket used to brake the descent of a space-craft as it lands on a planet.
Stratosphere:	upper part of atmosphere, six miles or more above Earth.
Space-walk:	a trip into space outside a space-craft, wearing a pressurised suit.
Sputnik:	name Soviets give to orbiting satellites.
Splash-down:	the drop into the sea for a space-craft and its occupants.
Troposphere:	lower layer of atmosphere below stratosphere.
Universe:	all galaxies are part of the universe, which is immeasurable. Scientists cannot estimate its size.
Van Allen belt:	a layer of radiation circling the Earth many miles up.

JOURNEY from HADES

This game is for two, three or four players, each player using a different coloured counter.
The object of the game is to escape from the underworld of Hades where you have been on a quest to rescue the sacred harp of Apollo from the depths of Hell. But there are four possible ways of escape.
Throw a dice to see which player takes which trail. Moves are then made according to the number thrown. Instructions must be followed.
The winner is the first player to reach the surface world and throw a six to get past Cerberus, the three-headed guardian of the entrance to the underworld.


START
*Fight with condemned soul. Miss a turn
Proteus the winged *horse takes you wrong way. Miss a turn
Fall leaping across a chasm. Miss a *turn
Strange Judges* send you back 3 places
Miss a turn
Back 2 places
Miss a turn
Fresh *water & food. Move on 4 places
* Battle with Madman. Miss a turn


Go on 2 places
20
21
22
23
* 24
Throw a six to vanquish Cerberus and gain the surface world... *
23
24 *
22
Back 1 place
20
19
18
Miss a turn
16
17
21
22
23
24 *
20
19 *
18
*Forced to carry Charon the Boatman across the River Styx Back 2 places
* 22
24 *
23
21
20
19
17
Fresh water go on 2 places
16
*Rescue Greek hero from trap. Delayed. Miss a turn
* 15
14
On 2 *** places
10
11
12
13
17
8
9
10
11
12
Miss a turn
14
15
16



SPACE SPECIAL

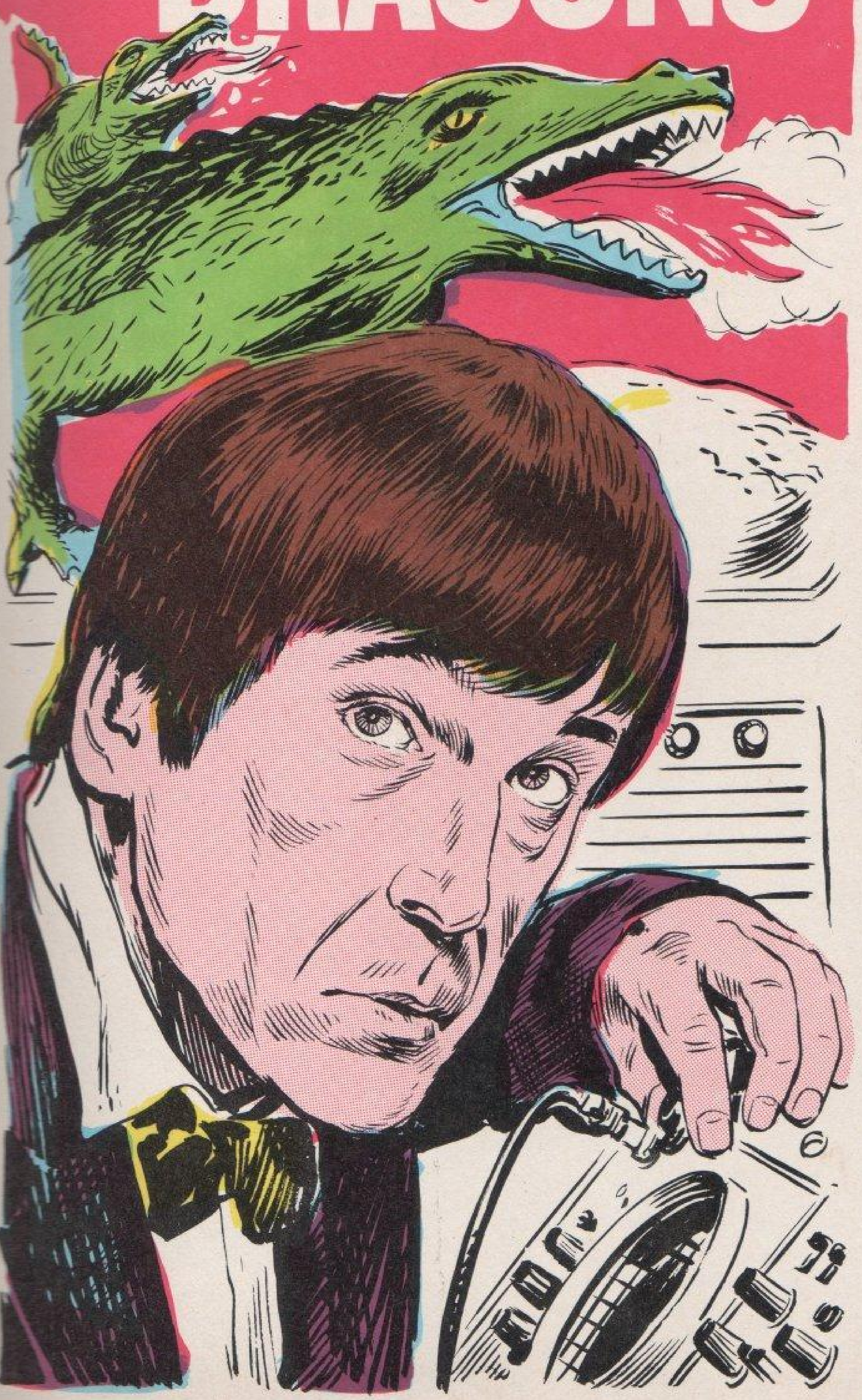
A 10 question quiz on early space achievements.

1. Which was the earliest earth satellite and when was it put into orbit?
2. Who made the first manned space flight?
3. How long did this flight last?
4. What was the approximate orbital speed for the flight?
5. What was special about Sputnik II?
6. Which is the most powerful rocket in the world?
7. Where is the American space project based?
8. What happened to the passenger in Sputnik II?
9. If the Russians reach the moon first will they claim it as their own property?
10. When was the first walk in space made?

ANSWERS

1. Sputnik I on 4 October 1957.
2. Yuri Gagarin.
3. From take-off to landing it lasted 108 minutes.
4. 17,398 m.p.h.
5. It carried a live dog named Laika as passenger.
6. The Saturn V is the most powerful rocket producing 7,500,000 lb. thrust.
7. Cape Kennedy.
8. The dog died of suffocation after 8 days in space.
9. No, a treaty has already been signed stating that the moon is international territory.
10. The first space walk was made by Alexei Leonov on 18 March 1965.

VALLEY OF DRAGONS



"DOCTOR! What's happening! Why are we swaying?" cried Victoria.

Tardis was in trouble. For the smooth motion of flight by which the ship transferred its loose pattern of protons and electrons through the inter-dimensional flux had suddenly given way to an unpleasant pitching motion.

"Hold on to the rails!" rapped Dr. Who. "I'll switch on the sight-screen."

The screen glowed with light. Then they could see that *Tardis* had materialised upon the huge, broad back of some giant creature. Its neck rose upward like a pitted column of green rock, and the great flanks were gnarled and ridged.

"We've landed on the back of a dinosaur!" gasped Jamie. "Just look at its armour-plated skin."

"Never mind admiring it," said Victoria anxiously. "Get us off before the monster dashes us to pieces!"

Dr. Who gave her a whimsical look. "I suppose you're right," he he agreed. "But it's a shame to leave. According to my reckoning we have materialised on one of the minor planets in the deep galactic environs, and I have been looking forward to visiting here for a long time."

Tardis was now shaking violently. Something was obviously about to happen. Perhaps the monster was about to rise up . . . or roll over. . . .

"Quick!" screamed Victoria, hanging on to the guard-rail desperately. "Throw the switches!"

The polished floor had already begun to tilt. Dr. Who made a valiant effort to reach the controls, but he had left it too late. The time-space craft was already tilting too steeply for him to regain the panel of gleaming switches, flickering dials and pulsing lights.

"Look out!" yelled Jamie. "We're going over!"

With a sickening lurch *Tardis* toppled from its fantastic perch. Mercifully for the three occupants it did not plunge sheer to the ground, but rolled down the armour-plated flanks. . . .

They fetched-up with a jarring crash upon the ground . . . or was it solid ground? For, even as they struggled to regain their feet, the trio could sense a movement—slower and more sluggish than the pitching on the creature's back, but quite noticeable.

They were relieved to find the ship in an upright position. A quick check showed that there seemed to be no major damage, merely some minor breakages.

"Amazing!" remarked Dr. Who. "But then, of course, I constructed the *Tardis* of materials that were intended to take shocks such as this."

Jamie was staring at one of the vision-screens. "Great ghosts!" he gasped. "Will you look at what we had landed on?"

Now they could see the entire bulk of the monster. The fifty-foot body was grotesque and bulbous, thick but sinuous and clad in overlapping scales that were coated with a green slime.

"It's—it's some kind of sea monster!" exclaimed Victoria. "Isn't it, Doctor?"

Dr. Who was bending over the screen, peering closely at the monster. "Ah yes . . . Now I remember . . . This is Reptileanus Hesperides from the Ozilean Era. . . ."

Jamie blew out his cheeks in exasperation: "Oh, spare us the Latin names, will you, Doctor?" he begged. "Is it a sea monster or not?"

His companion gave him a cold look. "It may loosely be called a sea monster, I suppose. Although more truly it is evolved from the dragons that once rampaged this planet."

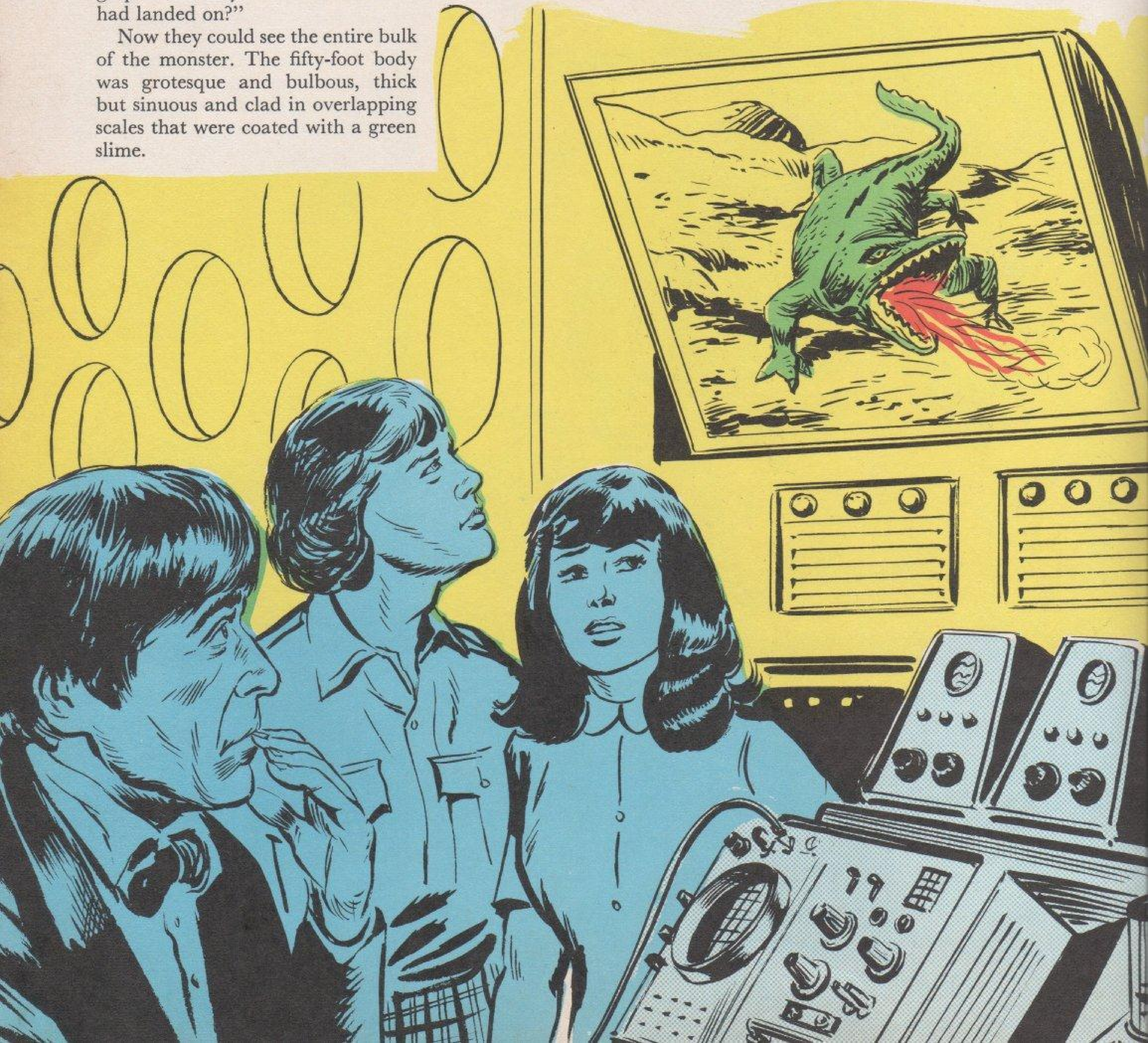
Victoria stared at him. "A dragon!" she whispered.

Her eyes returned to the screen. She was in time to see the great green bulk of the monster slide away out of sight.

"Good grief!" exclaimed Jamie. "Did you see that? Where did it go—into the ground?"

"Into the sea!" retorted the Doctor. "We appear to be on an ice-floe of some kind."

His long, slender fingers moved about the dials and another picture swam into view on the screen. It showed their position in long shot, and now it was plain that the *Tardis*



was adrift in some kind of ice-pack that stretched away to a distant blue line of land.

"Is it safe to go outside and look around, Doc?" queried Jamie.

Dr. Who frowned at the boy's familiar tone. He showed his annoyance by picking up his music-pipe and trilling a whimsical tune as he wandered away from the controls.

"Now you've annoyed him," whispered Victoria.

Jamie shrugged. "He's very touchy!" he grumbled. "Well, as far as I can tell from these instruments of his, it should be okay to step outside. . . . Stand by! I'm going to open the doors."

He did so, and Victoria watched him step jauntily through the great doors. . . .

The first breath he took in left him gagging and gasping like a fish out of water. He leaned weakly against the great door of the *Tardis*, his lungs dragging up the breath like a man in a vacuum. Then, with a titanic struggle, he managed to stagger back into the ship. Victoria caught him by the arm and helped him to a chair. The great doors slid shut behind him, and they glanced round to see their companion back at the controls.

"Very foolish, my boy!" sighed Dr. Who. "If you had checked the density gradation reading, you would have seen that the world outside those doors is not a hospitable one."

Before either could reply the Doctor vanished inside one of the store-rooms. He returned, carrying three garments that looked like bulky waistcoats.

"Here, put these on," he said. "They are the Atmospheric Density Jackets which will make it safe for us to venture out."

They strapped the jackets to their shoulders. Dr. Who reactivated the great doors, and led the way outside. Now they were able to breathe normally in the air of this strange new planet.

Victoria pointed excitedly to the freshly made deep grooves in the whitish calcified soil. "Look at the marks made by that dragon," she said.

The Doctor bent over the marks, measuring them carefully. He glanced up in time to see Jamie kneeling on the edge of their floating island, and about to dip his hands into the sea.

"Stop!" yelled Dr. Who. He jumped to his feet and hurried to the side of the startled boy. "You must never take risks on an unknown planet!" he chided.

"What do you mean?" asked Jamie, colouring. "It's only water."

"How do you know?" frowned the scientist. "I can recall other liquids on other worlds I have visited where there have been seas of acid, seas of liquid gases even."

Jamie rose hurriedly to his feet. "Sorry!" he muttered.

Dr. Who took a test-tube from his pocket. He took a specimen of the liquid and tested it. Then he nodded, satisfied: "Just as I thought! This has a high acidic content. . . . Only Reptileanus Hesperides with its scaly body could survive in this sea."

"Then how can we get to the land . . . if it *is* land," said Victoria, pointing to the distant blue line.

The Doctor was already turning back to the *Tardis*. "Simple, my child," he said. "We shall put on contra-gravity belts. . . . We can *fly* to land."

A few moments later they stood outside the ship again, wearing the bulky belts. Dr. Who touched a control button and rose lightly into the air. The others followed. Side by side they sped towards the land.

As they approached, a flicker of orange light drew their attention. It seemed to come from behind a ring of balsitic rocks which rose like jagged fangs from a rolling plain of grass.

Dr. Who changed direction and adjusted his belt so that he soared high to clear the peaks. The others followed suit. . . .

Now they could hear a din that grew louder as they approached.

"It sounds like trumpets," shouted Victoria.

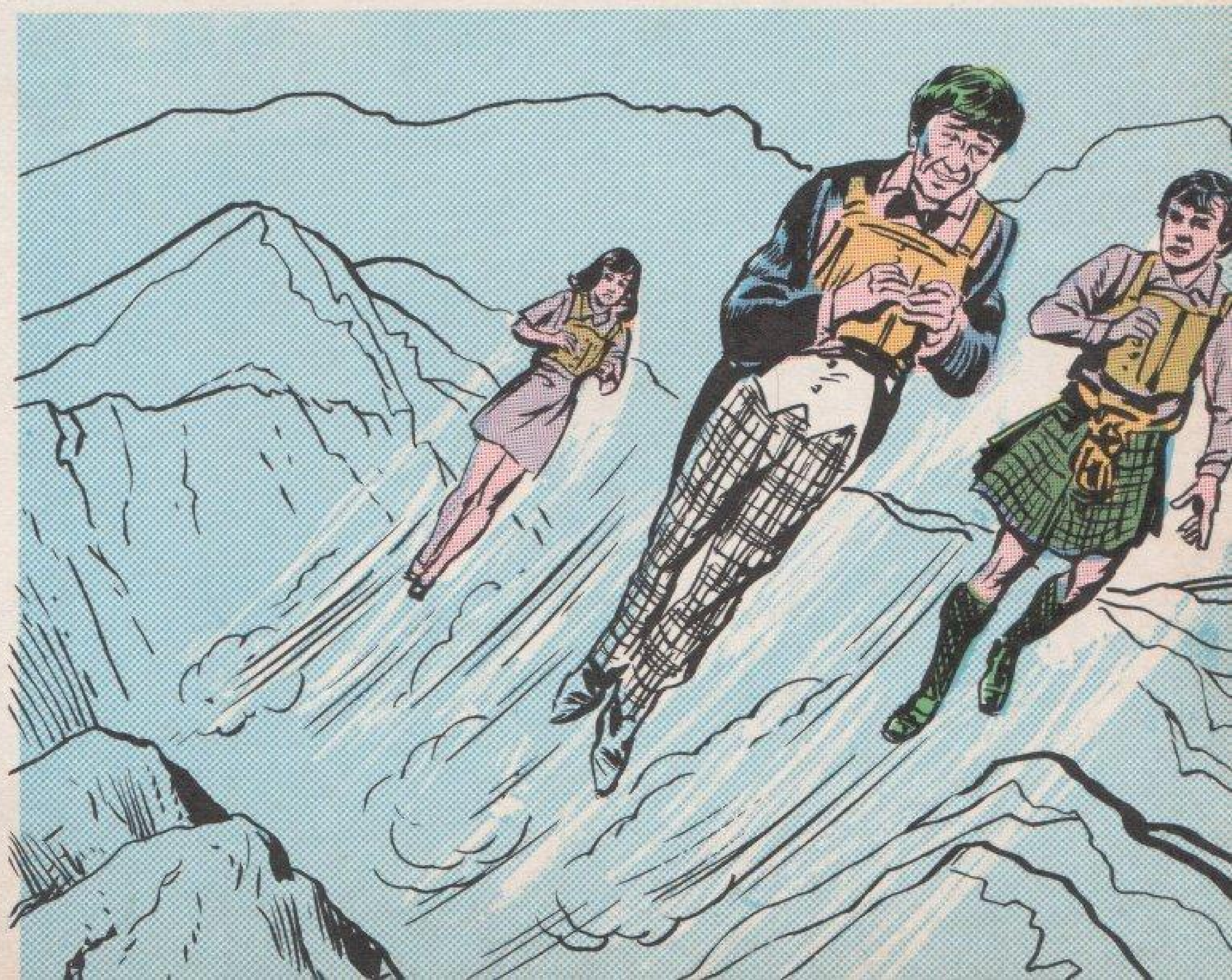
"And cymbals," added Jamie.

The Doctor had checked in his flight and was hovering. He pointed downward with an exclamation: "Great galaxies! It's a dragon fight!"

An incredible scene lay below them. In a vast amphitheatre, ringed by the jagged peaks, were thousands of black, mantis-like creatures wearing multi-coloured cloaks. They were watching a group of soldiers deployed around the arena below, intent on killing one of the huge dragons like the one that the *Tardis* had landed on.

Unnoticed, Dr. Who and his young companions dropped lower to watch the contest. . . .

The soldiers were remarkably like birds: red-brown in colour, completely hairless, with long necks,



almost chinless lower jaws and red crests, like roosters' combs, on the tops of their heads. They wore uniforms of close-fitting silver material which was surely metal but which moved and flowed like fabric.

Evidently the battle had reached a crucial stage. At a signal from the leader, the trumpets ceased to sound, and the cymbals were silent.

The dragon seemed to crouch in its place at the far side of the area, crest quivering. The great head moved a trifle, uncertainly, and the gem-like eyes rolled in their hooded sockets—blue, green and orange. . . .

Suddenly it hissed with a force that made the eardrums tingle. The long jaws opened, and a tongue of orange flame reached out towards its tormentors. . . .

Two of the soldiers fell with a shriek of pain. Instantly the silence was shattered. The baiters trotted left, clashing their cymbals and howling. The dragon went for them, head down and neck out-thrust, each immense leg placed with care.

At the same moment a rank of spearmen darted forward from the right and flung their weapons. In another instant the spears were buried in the scaleless underside of the rearing monster.

The dragon hissed again. A spasm passed along the great, pierced flank, and tiny runnels of dark blood began to trickle from the wounds.

The great head turned from side to side in search of the tormentors. The cheek-nodules swelled with rage. The wind shifted, bringing a rank, bitter odour to the watchers in the sky.

Flame flickering from the open jaws sent the spear-throwers running like birds. With one sudden, tremendous movement the dragon reared up on its hind legs and came bounding forward upon the centre ranks, who stood ready to launch a volley of slender missiles from a cross-bow type of weapon.

Wham! Wham! Wham! The deadly barrage struck home, stitching the now-exposed chest. The dragon screamed and tore at the barbs. It plunged in the direction from which they came.

The missile-throwers broke ranks and scattered. The dragon plunged on, bellowing. Suddenly the warheads of the missiles exploded inside the vast armoured body. Blood gushed forth in a great arched torrent. And the dragon stretched out its paws and talons, showed its huge and harrowed teeth in a scarlet ring, sounded its harsh death-cry, and fell face forward on the ground.

The mantis-like audience rose and waved their feelers in salute, and a droning wail of triumph rose to the ears of the hovering trio.

"Oh, it's horrible!" sobbed Victoria. "Let's go away from this place."

But even as she turned to fly back over the peaks, they found themselves being drawn downward by a gentle but irresistible force.

"We've been spotted!" exclaimed Jamie. "Look!"

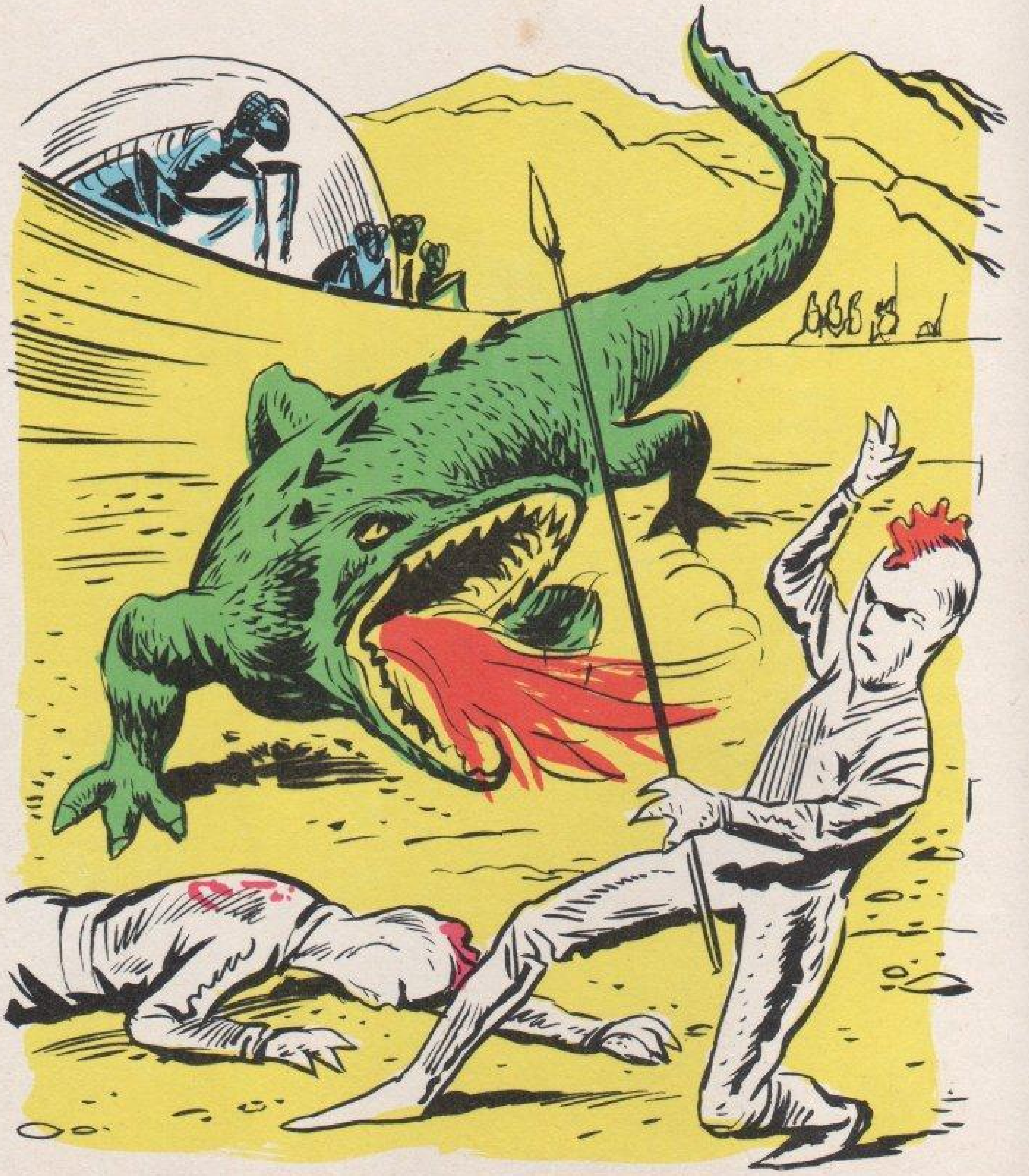
They were being drawn to the centre of the arena where an instrument like a searchlight had been hurriedly wheeled on. A ray from it had caught the intruders, neutralising the effect of their contragravity belts.

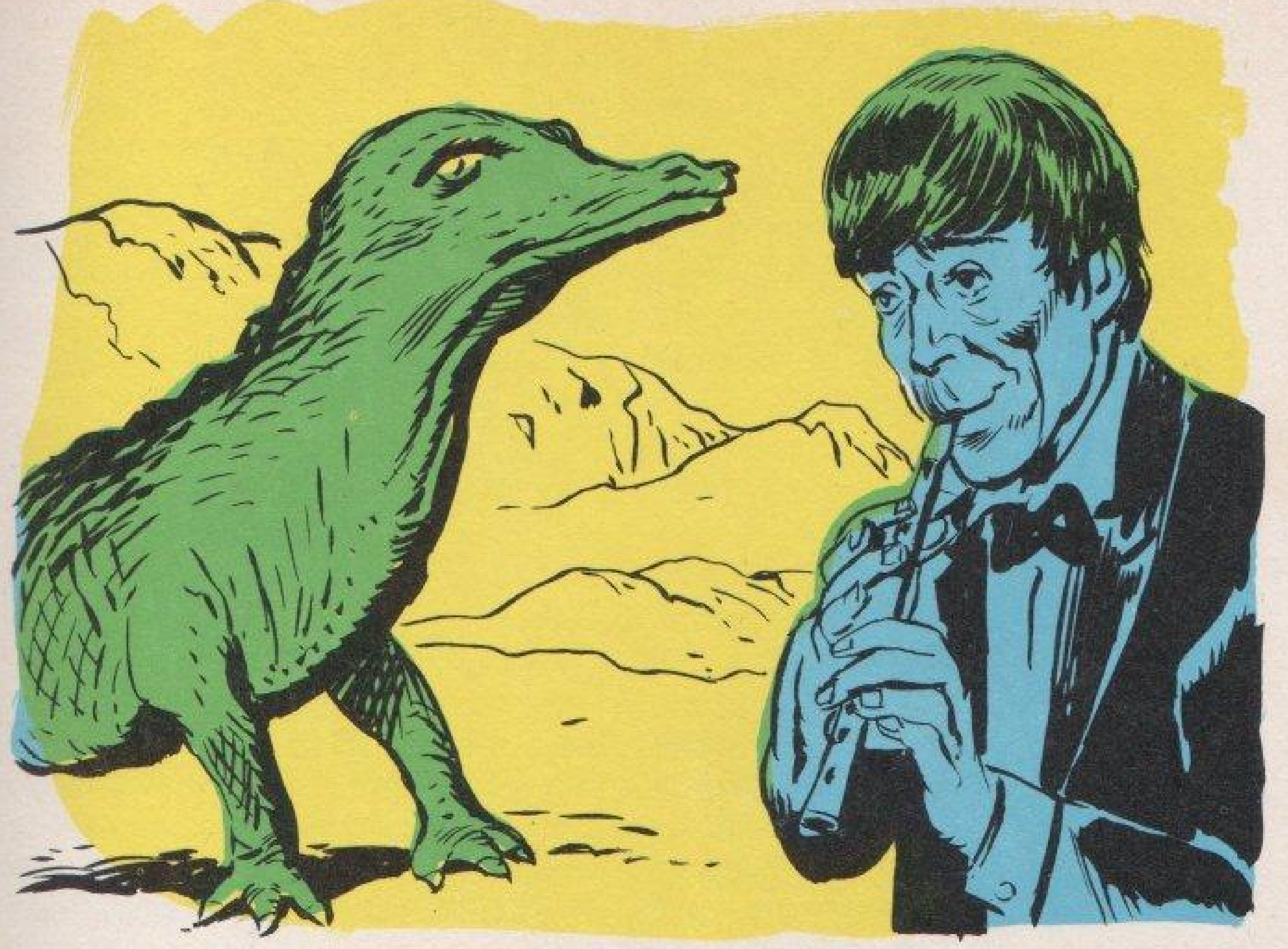
They landed gently on their feet. At once they were seized by guards. A bird-faced officer strode forward, holding a weapon that looked like a highwayman's pistol of old. He wore a tunic emblazoned with an emblem incorporating circling planets and birdlike crests.

"Who are you?" The voice was like the gobbling of a turkey and yet the Earth people understood it perfectly.

"We are travellers. . . . Our-er-spaceship landed in the middle of your sea," began Dr. Who.

The officer turned away. He raised





a three-toed claw and they saw a midget communicator strapped to the bony wrist. This time when he gobbled, the trio did not understand a word. Yet when he turned back to them again they heard him say: "Our masters, the Manti, do not believe your story. Do you wish to change it?"

"Certainly not!" retorted Dr. Who, annoyed. "It happens to be true. We are peaceful travellers, and I demand——"

His words were cut off by a curt shout of command from the officer. Sharp-toed claws seized the prisoners by the arms, and they found themselves being marched out of the arena. The audience, who they realised must be the Manti, leaned forward in their seats for a closer look at the captives, and waved their feelers about excitedly, making a droning sound that filled the air.

Beyond the arena was a honeycomb of trenches. The road ran between them and came at last to a steep-walled pit. As they approached, the rank, bitter odour of dragon assailed the nostrils of the captives again.

The soldiers halted before an observation platform erected above the pit. It was covered with a plastic half-dome. Seated on a throne of glittering crystal was one of the Manti, obviously the leader to judge by the gold trimmings and other finery of his cloak.

His drone reached the prisoners as a whispering voice: "We do not wish to torture you, strangers. Will you tell the truth?"

"We have already told your officer here that we are travellers . . . strangers to this planet," said Dr. Who stiffly.

"Yes, it's true! We've only just landed," put in Victoria.

"Our ship landed on a kind of floating island in the bay," added Jamie.

The Manti leader waved a negating feeler: "That is a lie! Our scout ships have just returned from scouring the bay. . . . They found no spaceship! Nothing!"

Dr. Who stepped forward. "But perhaps they didn't recognise it as a spaceship. It looks like—like a wooden box or a hut from the outside. . . ."

Rough claws pulled him back. The Manti's drone rose a pitch higher: "They found nothing! You are Imiga pirates! Admit it!"

"I don't know what you are talking about," said Dr. Who.

The Manti's feelers waved imperiously. "Set up another dummy so that they can see the fate that faces them," he droned.

There were several huge openings at various points around the pit. The three prisoners were dragged towards these and forced to look over the parapets. The thick dark odour of dragon caught them sharply. Victoria flinched. Jamie grew pale. . . .

Below them a dragon came rushing out of an enclosure. Trumpets blared and cymbals clashed as it came beating down the ground. But it ignored these distractions. Its attention was riveted on three dummies fastened to stakes—dummies that were dressed to resemble Dr. Who, Jamie and Victoria!

Bellowing its hatred and rage, the dragon flung itself upon the dummies, tossing them high and low as a terrier worries a rat.

"And that's what happens to our enemies!" said the Manti from above. "Throw the leader to the dragon first!"

Dr. Who found himself pushed violently towards the pit. Victoria screamed and Jamie struggled. But it was no use. The Doctor was bundled through an opening. . . .

He stood there facing the dragon, which was hissing menacingly as it looked around for a new victim. Then its gaze fell on Dr. Who. The great jaws opened, and a flicker of flame sprang into the air.

"Oh, poor Dr. Who!" gasped Jamie, struggling in his captors' grasp. "I never thought he'd end his amazing travels like this. . . . But wait a bit—what's he up to?"

Victoria was staring down over the parapet. "He's taking out his music pipe," she said. "He's going to play it!"

Jamie snorted. "He must be mad. . . . This is no time for——"

His voice trailed off as the first notes of music trilled from the pit. The effect was electrifying, for the dragon's head came up and cocked to one side—for all the world as if it was enjoying the music. Then the massive head began to sway solemnly from side to side in time to the melody. . . .

The Chief Manti leaned forward and droned shrilly: "Stop him! Do something! He's leading the dragon out of the pit! Sound the trumpets! Beat the cymbals!"

But the blare of the trumpets seemed to have lost its power to disturb the great creature from the acid sea. Enthralled by the Doctor's music, it followed him like an outsize lapdog as he made straight for the observation platform. . . .

The soldiers had already released their grip on Jamie and Victoria, and were turning to flee. The officer tried to rally them, but it was no use. Within a few seconds the platform was empty except for the travellers.

It was then that Dr. Who ceased to play. He scrambled up to join his young companions, leaving the dragon to wander round hunting pathetically for the trill of the music-pipe.

"Doctor, you're a marvel!" grinned Jamie, helping the older man to his feet.

"Hm. . . . Well, there's no time to lose," said the other. "We've got to get out of here before they feed us to another dragon—without music!"

Moving cautiously they followed the Doctor away from the pits. Apparently the news of a dragon on the loose had caused a panic evacuation of the area, for the trio saw not a soul to give the alarm at their escape.

Once outside the arena, they headed for the rocks. They were dismayed to find that their contra-gravity belts no longer allowed them to soar above ground. "Apparently they have blanketed the whole area with a force field to stop us escaping," mused Dr. Who.

They began to climb upwards, hoping to find a path over the peaks and back to the shores of the acid sea. But half-way up they were exhausted.

"Oh, I can't go on!" wept Victoria. "I'm not able to climb high places, anyway. . . ."

She broke off as Dr. Who raised his hand for silence. "Listen!" he whispered.

From somewhere close at hand there came a gobbling like that of turkeys. Cautiously they moved towards the sound. It came from a cave whose mouth was cleverly screened by vegetation.

Crawling closer, the trio peered inside.

"The *Tardis*!" gasped Victoria.

The familiar blue police telephone-box stood in the centre of the cave, surrounded by a band of bird-like creatures. They were dressed in motley, torn uniforms and were bristling with weapons.

Dr. Who had an inspiration. "The pirates of Imiga!" he whispered over his shoulder. "No wonder the others couldn't find our ship where we had left it. These pirates captured it and brought it here. . . . But they haven't been able to open it!"

"That's all very well, but how do we get them out of the way long enough to get back into the ship?" Jamie asked.

The Doctor glanced round at the piles of loose boulders on the slopes near by. "We'll start an avalanche," he said. "That ought to fetch them running."

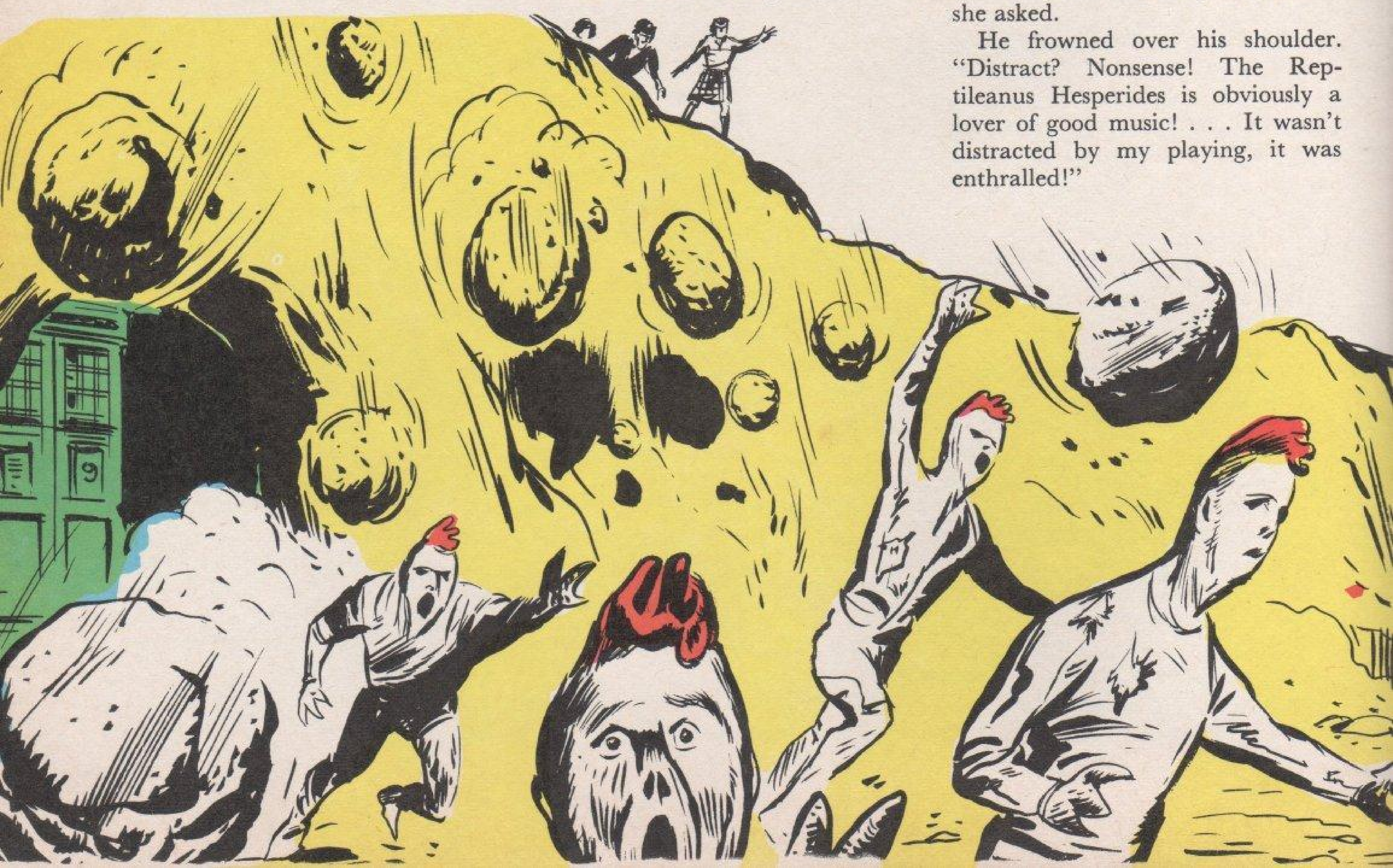
It proved easier than they expected. The boulders were loose and the slope was steep. As they heaved three big boulders down the slope, the whole mountainside seemed to shake itself. . . .

With a tremendous rumble the avalanche gathered speed. And as the pirates of Imiga came running out, the three fugitives dashed into the cave.

Safe inside the *Tardis*, Victoria flopped into a chair trembling with fright, while the Doctor drove home the switches that would remove them from this strange and hostile planet.

"How did you know your music would distract that dragon, Doctor?" she asked.

He frowned over his shoulder. "Distract? Nonsense! The Repileanus Hesperides is obviously a lover of good music! . . . It wasn't distracted by my playing, it was enthralled!"

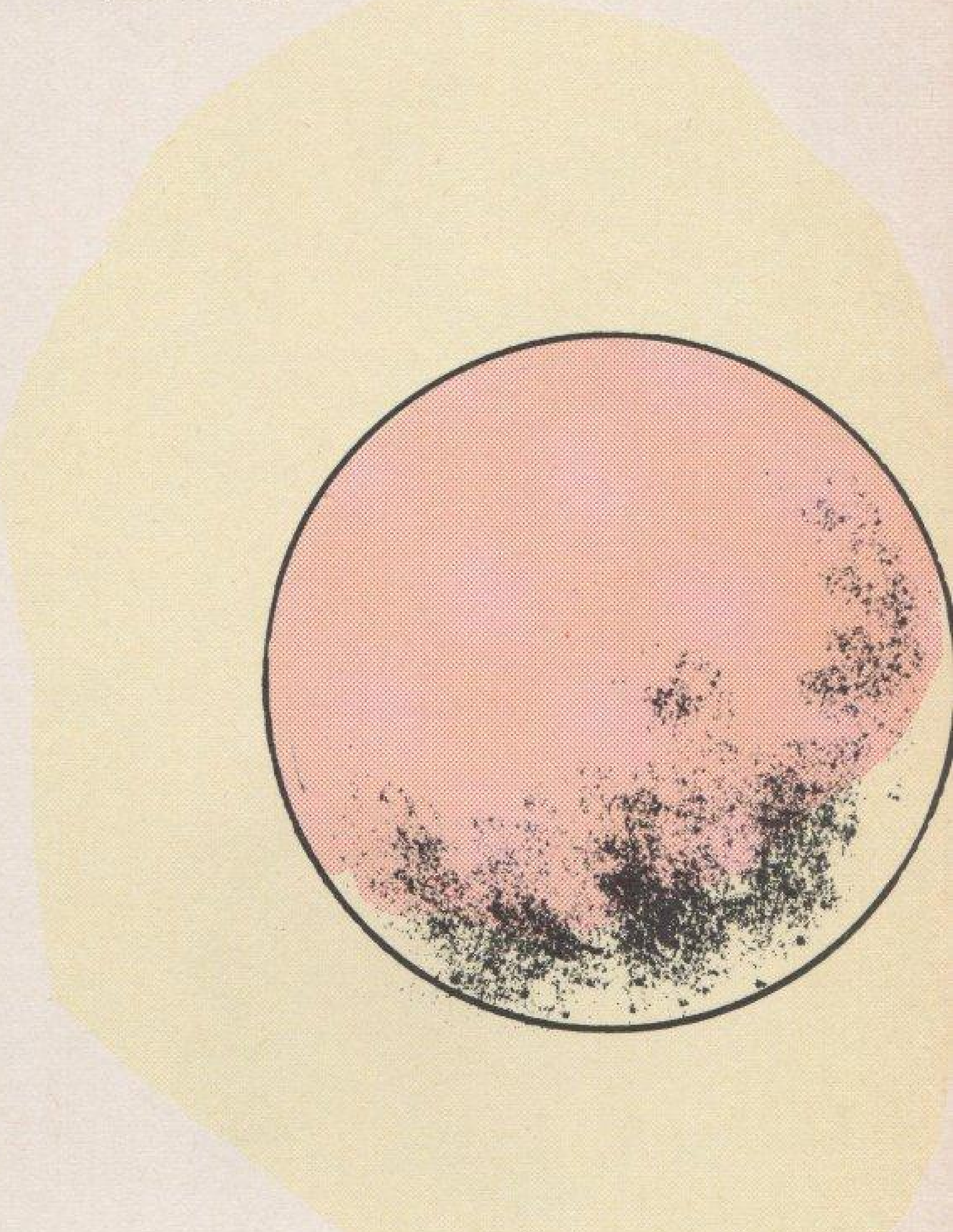


Our SOLAR SYSTEM

The sun is the nearest star to Earth, and round it revolve the nine planets comprising the Solar System, including our Earth. Our sister-planets are strange and varied.

MERCURY

This is the smallest of the planets and also the nearest to the sun. It has no atmosphere because of its low gravity and because of its high temperature on one side and deadly cold on the other. This comes about because Mercury rotates at the same speed as it circles the sun, 225 days for a revolution, and consequently one side of the planet continually faces the sun.



VENUS

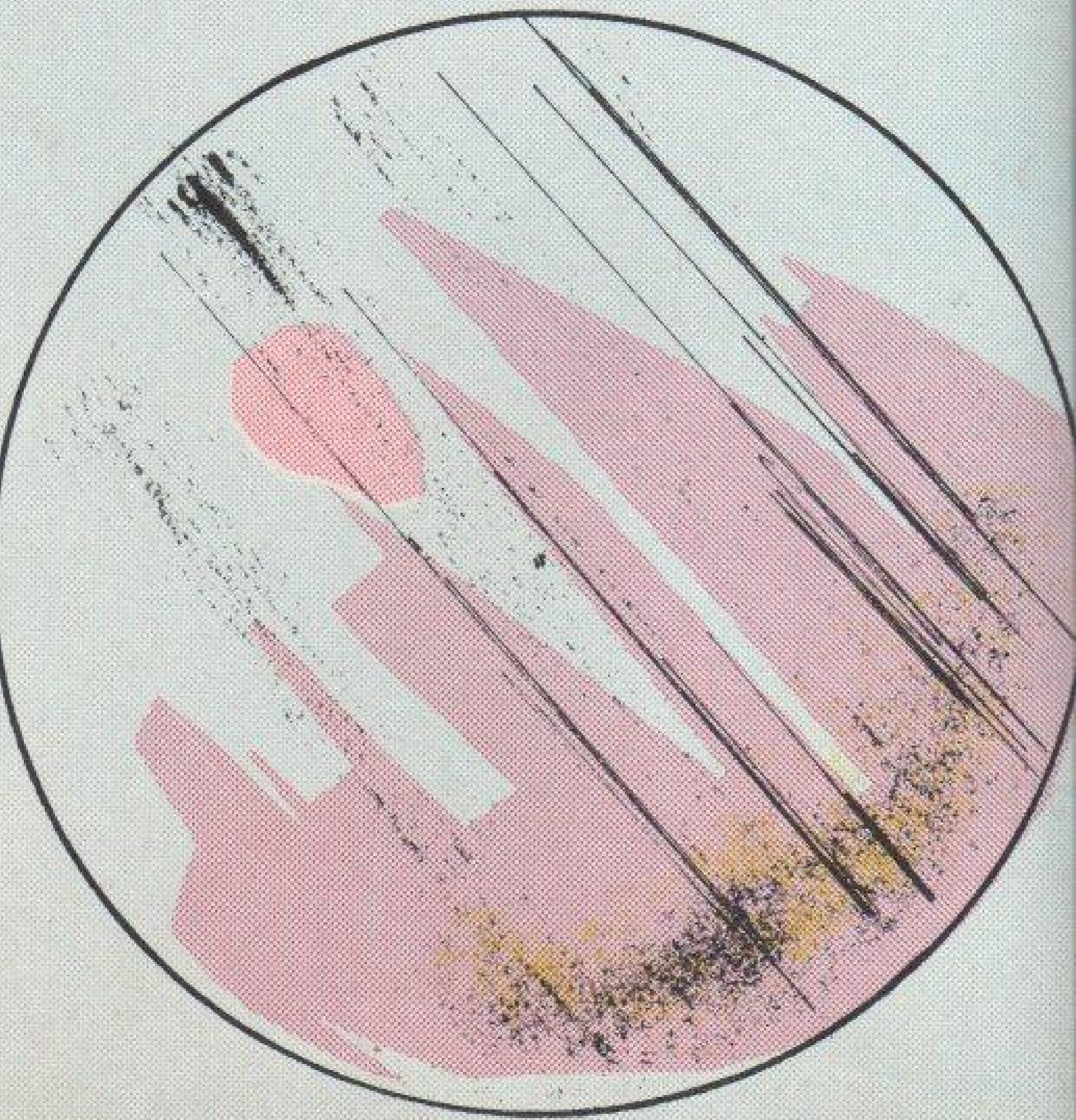
This planet is the same size as Earth, but because it is continually shrouded in cloud little is known about it. The American spacecraft Mariner II tells us some facts about it. The planet rotates slowly, and consequently a Venusian day is equivalent to 225 Earth days. Speculation as to the planet's surface ranged from suggestions that it was a burning desert, swept by fiery winds, to suspicions that it was a vast ocean dotted with islands. Mariner II tells us that the surface is, in fact, of dry reddish soil and that there is little likelihood of any life existing there.

EARTH

This, of course, is our planet. There are many extremes in the solar system, in heat and cold, and in size, but it is the moderate temperature and gravity which make life on earth possible. The atmosphere stops intense heat and intense cold, enables us to breathe and plants to grow, and stops showers of meteorites striking the surface of the planet.

MARS

This is our nearest neighbour and is about half the size of Earth. It is known as 'the red planet', because it is covered with large brown deserts and scattered heaps of rocks. There is a polar ice-cap on Mars during its winter, and when it melts during summer the brownish areas turn green. It is thought that this is moss and fungi, but this is believed to be the only form of life on the planet. Mars has two tiny moons, not spherical but merely jagged hunks of rock. They are Phobos, 10 miles in diameter, and Deimos 5 miles in diameter.

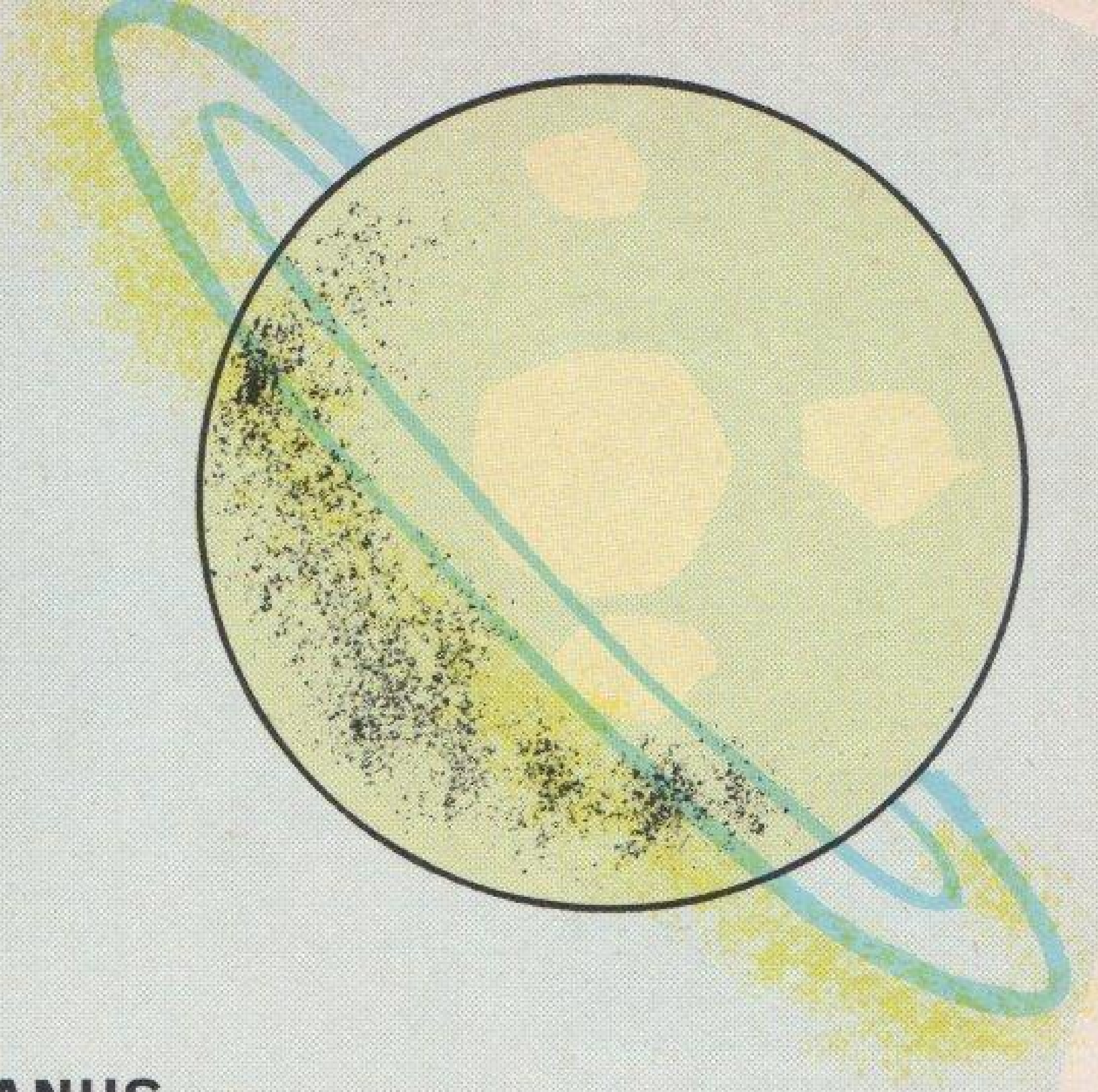


JUPITER

The largest of the planets, it is also the fastest rotating, taking only ten hours to rotate once. Life on Jupiter, in fact even a landing on Jupiter, seems impossible, partly because of the particularly dense and poisonous atmosphere, partly because of its tremendous gravitational pull and partly because the planet is covered in ice, thousands of miles deep. Jupiter has no less than twelve moons, and although eight of them are only about 100 miles in diameter, two are as large as our moon, and two as large as Mercury.

SATURN

This, the second largest planet in the solar system, is also perhaps the most beautiful. It is famous for its rings, which circle the planet like a disc, without touching it. These rings throw vast shadows across the planet's surface, which is probably, like Jupiter, covered in ice. Saturn circles the sun once every 29 years, but rotates on its axis quickly—Saturn's day is ten hours long. Ten moons circle Saturn; Titan, the largest, is the size of our moon.

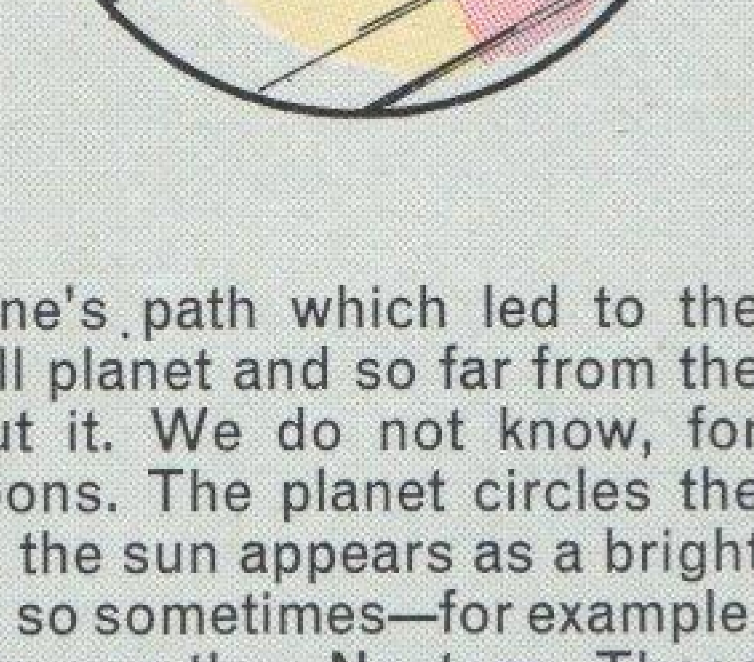


URANUS

Discovered by William Herschel, the German astronomer, in 1781, Uranus glows with a strange green light. It is 1,782 million miles away from the sun and revolves around the sun once in eighty-four years. Unlike the other planets, Uranus' axis is almost horizontal, so instead of spinning through space like a top, it travels along its path with a corkscrew motion. Uranus has five moons, all of them tiny.

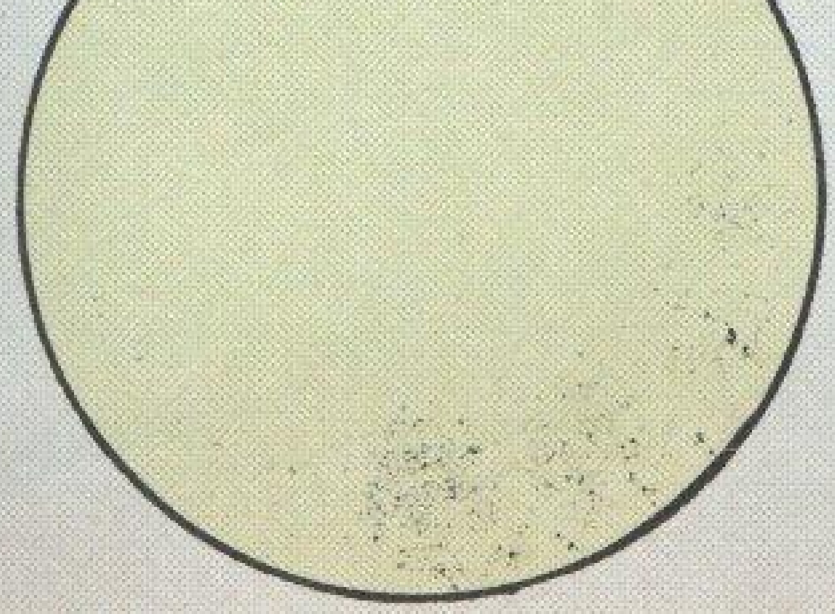
NEPTUNE

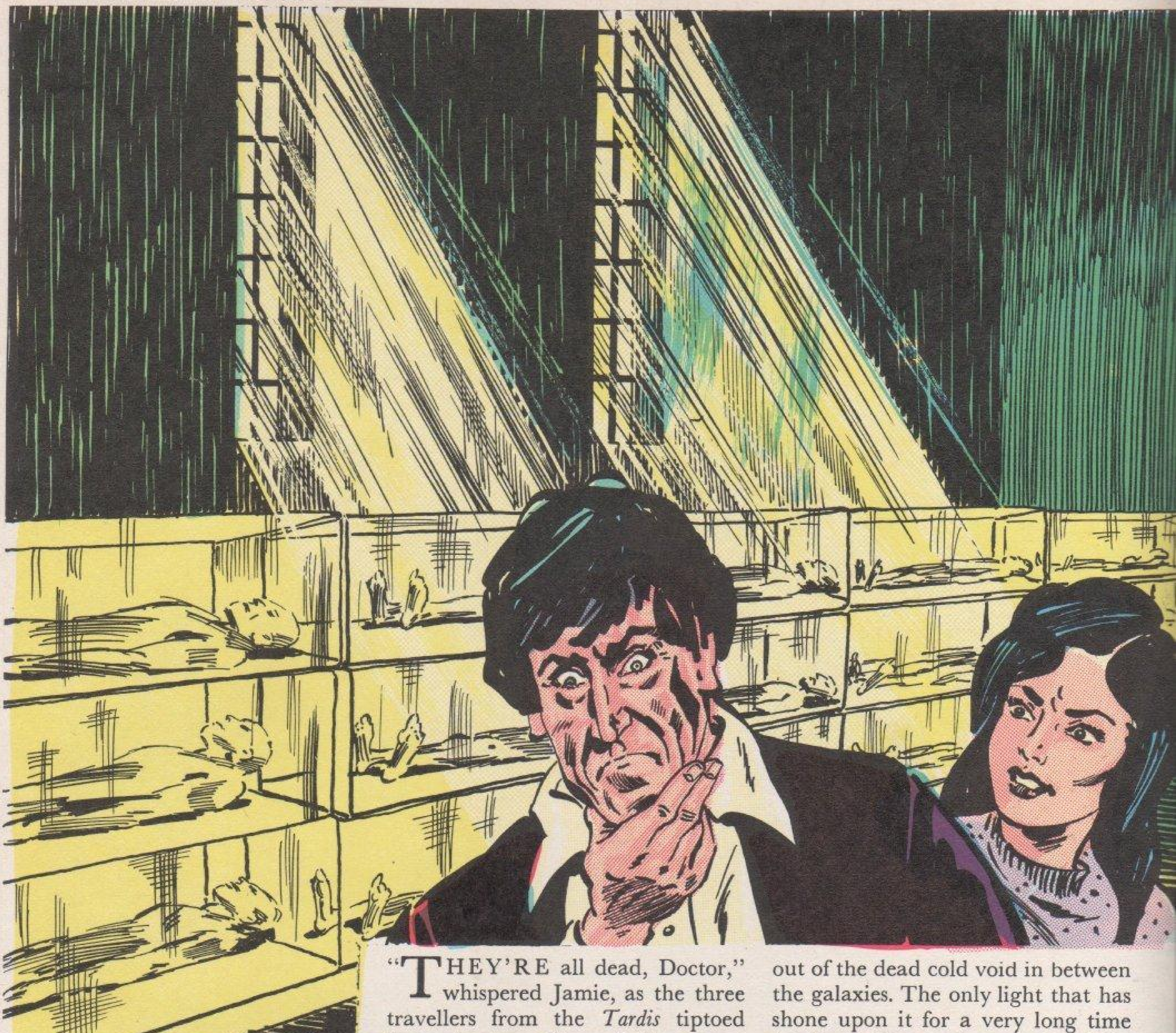
Studying the movements of Uranus astronomers noted that there were certain irregularities about it. They suspected this was due to the gravitational pull of some other planet. Scientists calculated that there must be another planet and telescopes eventually found Neptune, less than a minute from where calculations had plotted it. The icy surface of Neptune is about —200°C, and the planet is invisible to the naked eye. It has two moons, Triton and Nereid, and it revolves around the sun, which seems to be no more than a small circle of light, in 165 years.



PLUTO

It was irregularities in Neptune's path which led to the discovery of Pluto. It is a small planet and so far from the sun that little is known about it. We do not know, for instance, if Pluto has any moons. The planet circles the sun in complete darkness, and the sun appears as a bright star. Pluto's path is very erratic, so sometimes—for example, in 1989—it will be nearer to the sun than Neptune. These irregularities in Pluto's path have led astronomers and mathematicians to suspect that there may even be a further planet, as yet undiscovered, in our Solar System. If this is so, what mysteries will it hold, what wonders will it possess?





PLANET FROM NOWHERE

"THEY'RE all dead, Doctor," whispered Jamie, as the three travellers from the *Tardis* tiptoed through the aisles of the great vault that looked as though it had originally been intended as a cathedral. "Will ye just look at them: hundreds, thousands of them, all dead, cold and stiff. My word, this place fair gives me the creeps. How about you, Victoria?"

"Downright spooky," the girl agreed, with a shiver. "To think of all these people lying here in glass cases, for who knows how long."

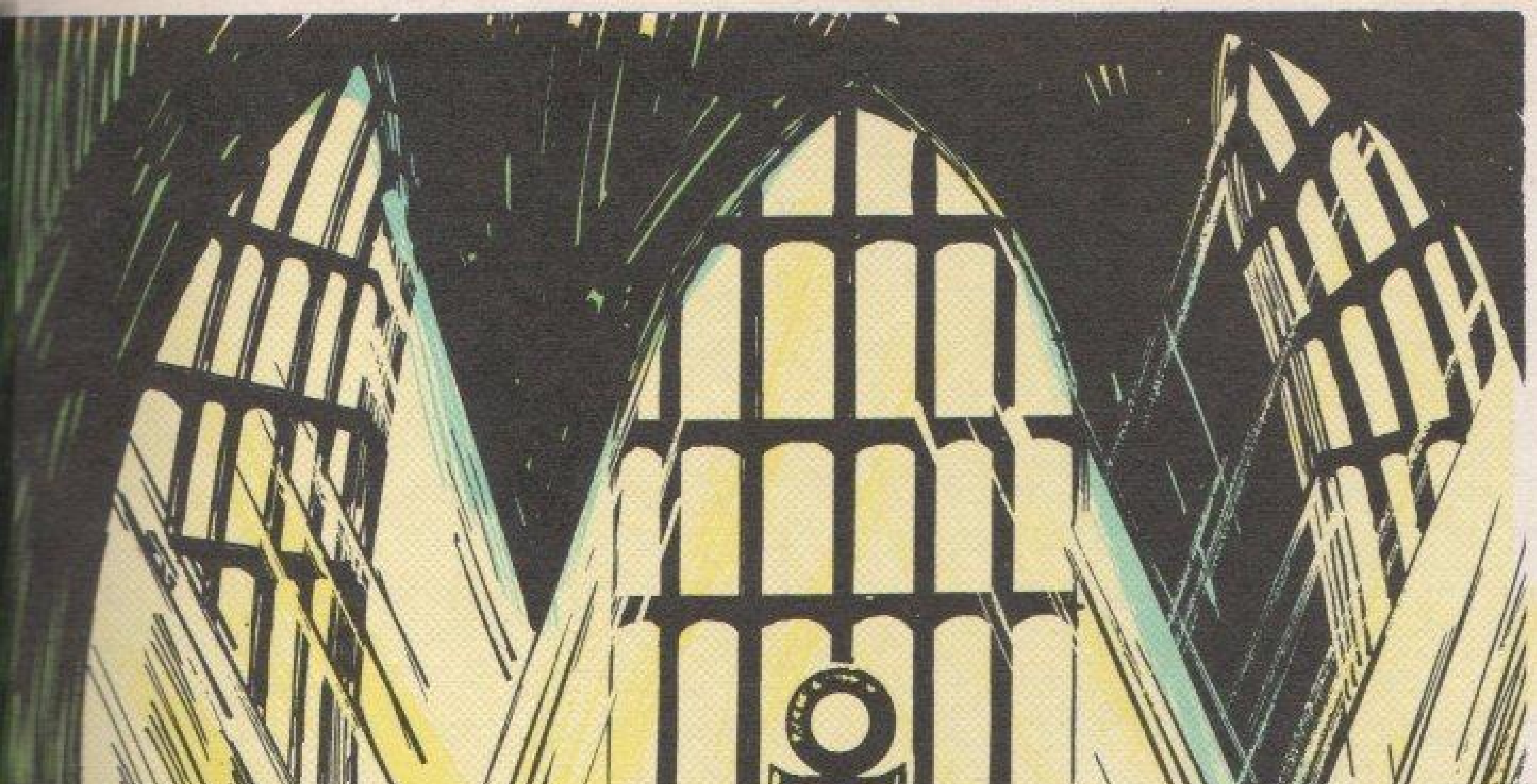
"We can guess a little about the length of time, Victoria," said Dr. Who, and he stood with arms folded and one hand stroking his chin. "When *Tardis* landed on this world we saw few stars in the sky except that big one, which looks to be a long way away. This world has come out of the dead cold void in between the galaxies. The only light that has shone upon it for a very long time has been this one lone star and the very faint light emitted by the very distant galaxies. This is a wild planet, children, a runaway, rogue world, without a proper sun or fellow-planets. It may have been on its journey for millions of years!"

"Ye don't say, Doctor," said Jamie with scorn. "You will talk about millions of years and so on. How d'ye know, I'd like to know?"

"Don't bother me, Jamie," said the Doctor absently. "I'm thinking."

"Well, while you're thinking, Doctor," grinned Jamie, "Victoria and I will do a bit of exploring. It looks like an altar up there. Come on, Victoria."

Abstractedly, he watched them go. He was struggling with the puzzle to



his curious, inquiring mind presented by this very weird planet on which they had landed. It was very dark and the great building in which they stood seemed to be the only structure on this continent, surrounded by the salt valleys which had obviously once been oceans. The creatures, very manlike, who lay in the many glass cases in rows all round them, were not, as Jamie had said, dead. No, the Doctor felt certain that they were still living, but in suspended animation!

A cry from Jamie drew his attention and he strode swiftly up the aisle towards the pile of metal blocks that did somehow look like an altar.

"Look, Doctor," said Jamie with excitement. "Look what we found."

In the middle of the altar stood a tall symbol, in bluish metal, still glittering and without corrosion. The symbol itself he knew. It was the *Ankh*, that sign of a tall cross with a circle in place of the top post. It was a symbol once used on Earth, in Ancient Egypt, for Life itself. The sign of Life! If this *was* an altar and if the vast building was, in truth, a cathedral, then these people sleeping round them had been Life-worshippers!

"There's a skeleton here," said Jamie with a gasp, and Victoria drew back, her hand darting to her mouth to suppress a scream. "It's just a few lines of grey dust but you can see it's been a skeleton. It looks as though it—that is the person who—how do you put it about a skeleton, Doctor?"

"It's all right, Jamie," said the Doctor and he put an arm round the shoulders of the girl. "Now, now, Victoria, child, there's nothing to be afraid of. We are all together and the *Tardis* is just outside."

"Oh, let's leave this awful place," the girl begged. "Let's go back into the *Tardis* and get away from this dreadful place. It's like a great tomb!"

"These people aren't *dead*, Victoria," said Dr. Who, with a twinkle. "They are merely in suspended animation. They've lain like this for ages, waiting for us to come along and——"

He broke off, for he had seen a bright lever beneath the *Ankh* on the altar. The lever was set against another symbol HTP and the Doctor knew that this was another Ancient Egyptian hieroglyphic and that this one signified peace or rest. The lever lay against an arc and was positioned at the HTP sign. At the top of the arc was engraved the symbol of Life, the *Ankh*.

A wild idea came to him and he went closer. A faint line of grey dust led almost up to the lever and from it downwards to the faint outline of what might actually be, as Jamie had said, a human skeleton.

"I'm going to wake them up, children," he said cheerfully and he stepped up to the altar.

"For the love of heaven, Doctor," yelled Jamie, and Victoria let out a shrill scream.

Jamie's hand was on his wrist but it was already too late. The lever had moved and pointed now to the sign of Life. He stepped back, breathing a little more quickly, and they all three stood on the altar looking outwards towards the long rows of glass coffins.

The hairs were prickling on all their necks as their eyes swept over the rows of caskets. For the lids were *moving*! The movement of all those thousands of glass lids was like a sparkle in that dim place. They stood motionless, Dr. Who in the centre and Jamie and Victoria on either side of him, and they watched with staring eyes. They saw the sleeping people rise in the caskets, step out and stare all round them.

The sound began as a murmur, grew into a louder wail and ended in a keening high note, and the three standing under the *Ankh* saw that every member of that vast throng had dropped to his knees and was wailing out what sounded very suspiciously like a hymn!

"My goodness," exclaimed Dr. Who. "This won't do at all, you know. These creatures think we are gods and they are worshipping us. Never do at all. My goodness, must stop this right away."

He jumped down from the altar and the other two followed him. The result of their movements was quite extraordinary. The ranks of the kneeling people were scrambling to their feet and crowding backwards, away from the altar.

Dr. Who halted and raised a hand. "Do not fear us," he called out. "We are human beings, as you are. We found you sleeping and we awakened you. That is all."

A small knot of the people had detached themselves from the main throng and were coming forward, hesitantly and fearfully. They were very thin but they were quite human in all respects. Their garments were loosely styled and obviously of metallic origin. One came forward and stood not six feet away.

"You are the gods we never believed in," he said. "Woe to us that we did not believe. You have come now to destroy us."

"Fiddlesticks!" snorted Dr. Who angrily. "Why should I want to destroy you? What's all this talk of destruction?"

"All life wishes to destroy other life," came the reply. "That is the great Law of Nature. We worshipped the Life Principle and because we had destroyed our enemies, we knew that a great retribution would fall on us. So we sealed ourselves into our caskets for the long sleep. How long have we been sleeping, strangers?"

"How should I know?" said Dr. Who, with a wide grin. "All we know is that we are travellers through Space and Time, and we arrived on your world and found you like you were, in those glass cases. We know nothing. It's up to you to figure it out".

The face of the man looked more dejected than before. He squatted down on the metal floor and Dr. Who sat down with him. The whole thing was so very unusual that he was fascinated to hear the story. He didn't realise that he was alone and that Victoria and Jamie had vanished behind the altar. The girl had been scared almost out of her wits when the caskets had opened, and she had backed fearfully round to the rear of the altar, Jamie by her side.

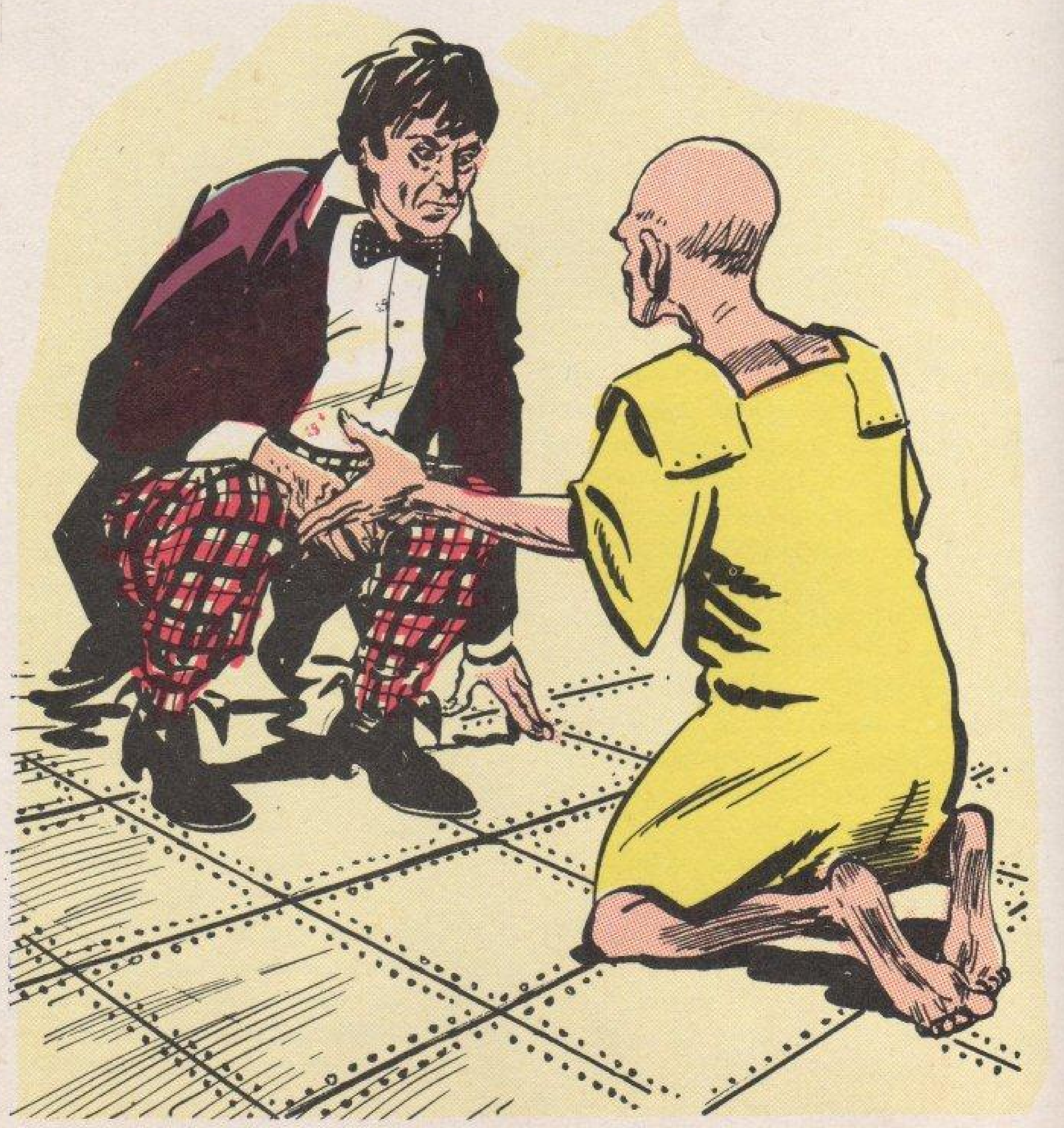
"There was a great war," sighed the man. "The greatest war of all time. We Salonians lived in the Western Hemisphere of our world, which we called Axal, and the Colonians lived in the Eastern Hemisphere. Our star went nova and exploded and our world was hurled into outer space."

"Guessed that," interjected the Doctor. "Hardly any stars to be seen now, just the one and at a great distance. Your world is almost in the void."

The Salonian jumped to his feet. His face was angry. "At first we thought you were gods. Now we know you to be demons. If what you say is true why did you waken us? Why did you not leave us to sleep in peace?"

"I thought you people claimed to worship the Life Principle," said the Doctor with sarcasm. "Doesn't look much like it when you skulk away for ages, sleeping your cowardly sleep of unconsciousness. What's your problem? You have air here and you obviously have food, for your sleeping bodies would need air and sustenance. What made you do this thing to yourselves?"

"I told you why we did it," said the other mournfully. "We had sinned against Life. We had destroyed half of Axal and we feared the wrath of the Life God, so we laid ourselves down to sleep, for ever, if necessary, rather than face his anger. One brave



man pressed the lever which activates the cabinets and remained to die alone in this great temple."

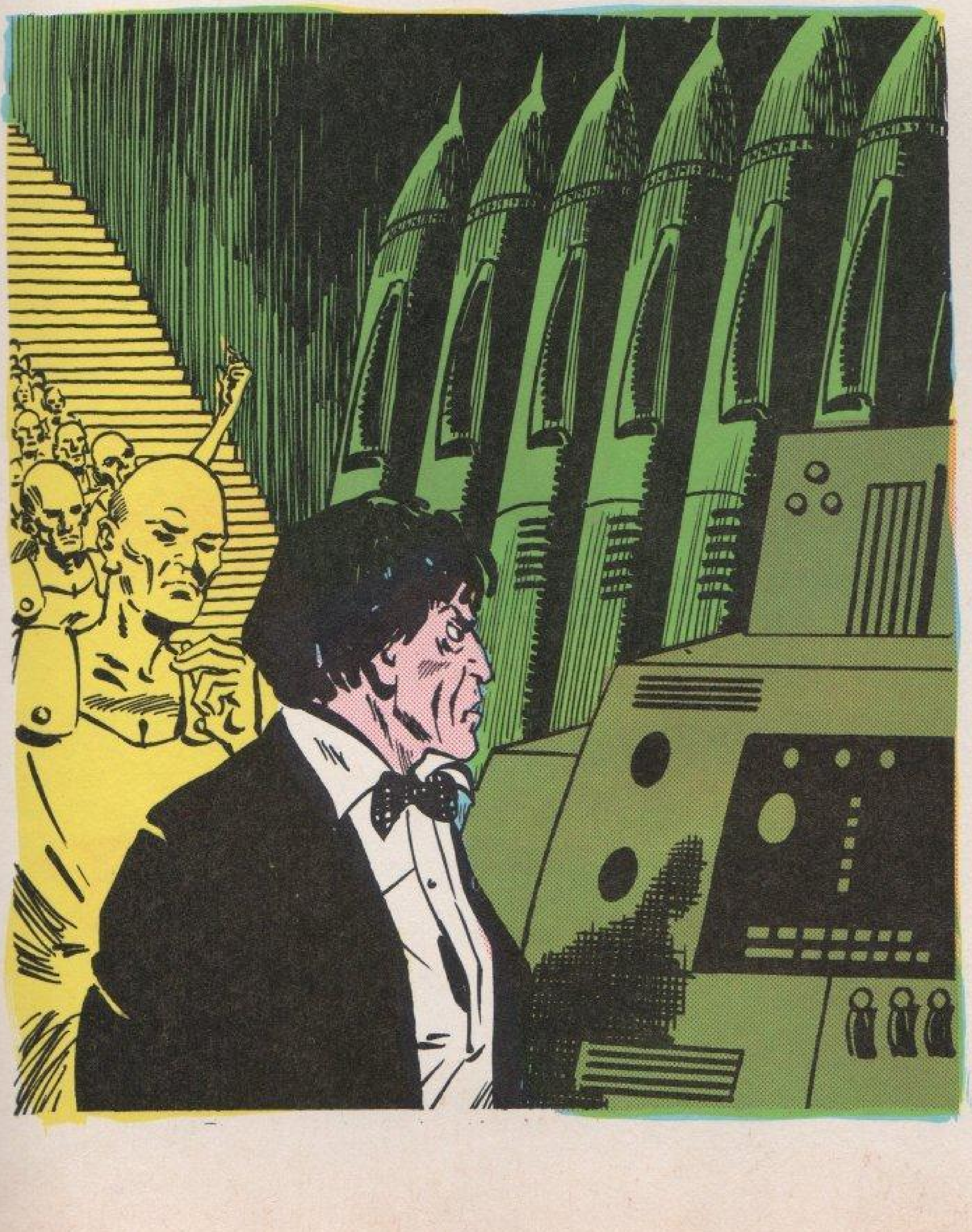
"You know, we aren't getting very far with this," said Dr. Who. "Come outside and take a look at your world. What do you expect to see?"

"Why, we expect to see our great city, in the centre of which is this mighty tower," said the other in surprise. "This city is the most wonderful marvel of the modern age. It is——"

He stopped, for they had come out on to the platform outside the great metal door. The Salonian staggered where he stood and he stared out with a tragic face at the wilderness that lay everywhere around the enormous temple-tomb. "It is all ——", he stopped, shuddered and tears came into his eyes, "it is all like this?"

"Not a thing standing," replied Dr. Who, energetically. "How this one big structure remains standing, I can't tell. Why hasn't it been eroded away by time, like the rest of the city you were talking about?"

"Our city was not eroded!" came the sharp reply. "It was destroyed! So we had not accounted for all those dastardly Colonians after all. After we had lain down in our caskets, they came back and destroyed our great city. The temple is built of impervious metal, with compacted atoms. No force in the universe can destroy it. But they, those Colonian animals, they levelled our great city. Now, at last, you have given us a reason for our awakening. We will fly north and we will punish those cruel Colonians. Not enough that we send our missiles; we must see and enjoy the punishment of those infidels. We will make of their land a desert like this." He turned quickly and strode inside.



Dr. Who ran after him. "Hey, there, wait a minute, you can't do that!" he shouted. "For a worshipper of the Life Principle, you people have an odd way of serving your god. We three came here——". He stopped and, looking round him, for the first time he missed his two companions. "Victoria! Jamie! Where are you? Now don't play games, there's good children."

The great crowd of people were surging towards the altar and the Salonian chief was haranguing them as he walked at their head. Dr. Who was lost in the dense mob and they took scant notice of him, their newly awakened eyes filled with hate and vengeance. He was swept along with them helplessly and was taken behind the altar and down a long flight of wide steps. He was like a matchstick caught in a wild torrent and he realised it was futile to struggle.

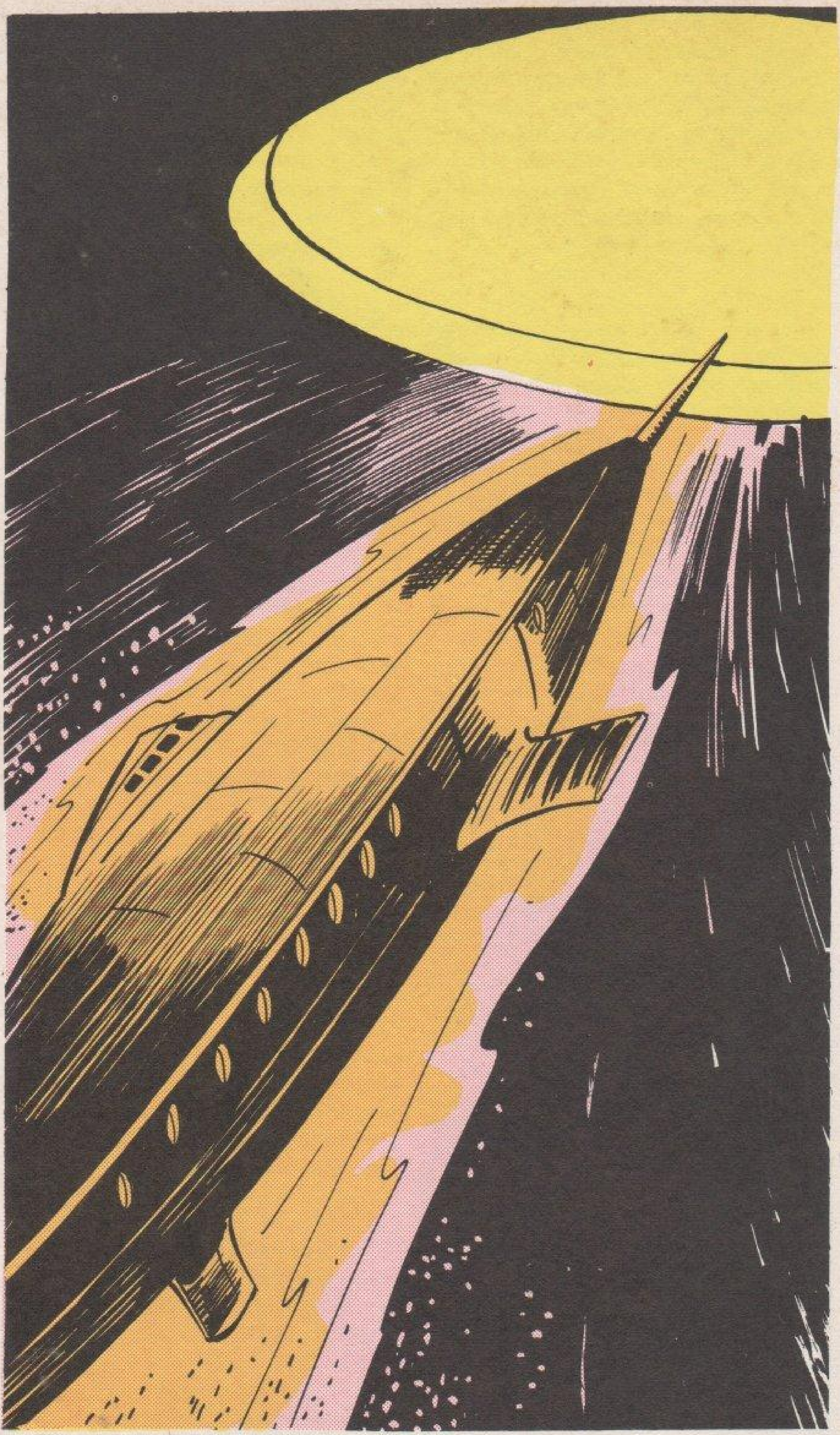
Below the floor-level there were many glittering machines and, further on, rows of gigantic rockets. Dr. Who's heart trembled. Had he, by his impulsive act of awakening these people, precipitated a new and more frightful renewal of the war between these two races? What could he do to stem the tide of hate?

Then he spied Jamie and Victoria and they were far above his head. They were clinging to the top of a tower crane that bore in its cradle a great torpedo. The Salonians had reactivated the automatic machinery and were loading up their war rockets. "What on earth are you doing up there?" he bellowed.

"We got lost, Doctor," came Victoria's shrill voice. "We were tired and we sat down. Next thing we knew this thing was going up. What's happening?"

The Salonian king was by his side. "Your two younger friends seem to be of the same opinion as ourselves about those brutal Colonians. They are helping to load our rockets. You shall all travel with me in the lead passenger craft. You shall see how we retaliate against them. How dare they come and obliterate our lovely Hemisphere?"

"I've told you," said Dr. Who wearily. "No one destroyed your



continent. It was age, man, the thousands of years of erosion that did it."

But the Salonian would not listen and the tower crane brought Victoria and Jamie down. Now almost prisoners, they were thrust into the control room of a large passenger rocket and the Salonian and his crew followed them. A great hole appeared in the roof of the place and then flame belched from the rear of the rocket and it hurtled out into the dim light.

Suddenly Dr. Who felt very, very old, and all the weight of his long centuries fell upon him and threatened to crush him. He wept and the girl put her arm round his shoulder.

"Don't cry, Doctor," she soothed him. "There's nothing we could do to stop them now."

"Stop them!" he said wildly. "If we—rather I—had not been the criminal fool I was to reawaken these bloodthirsty fiends, this mission of destruction wouldn't now be setting out. *I* am responsible—I alone—for this, the destruction of all the people in the Eastern Hemisphere. Let me weep, I am a lost man, the most wicked man in the universe."

"We'll use the cobalt bombs," the Salonian king was saying to his crew. "They gave excellent results last time. As he spoke the words, a shadow came over his face and he looked momentarily worried. Some vague memory had come to him. But he shrugged it away and went on detailing his men to their duties, their first activity for many centuries.

High in the air the rocket flew, at a tremendous speed which the Doctor estimated must be in the thousands of miles per hour range. A new and very strange and horrible thought had come to him and he began to study more closely the Salonian men around him. Many thousands of years had, of course, passed since the Twentieth Century and there could be many evolutionary changes. But how strange to find the Egyptian symbols for Life and Rest here on this planet millions of miles from the Solar System? Astronomers on Earth had often speculated on what would happen if the Sun should go nova and explode. . . . .

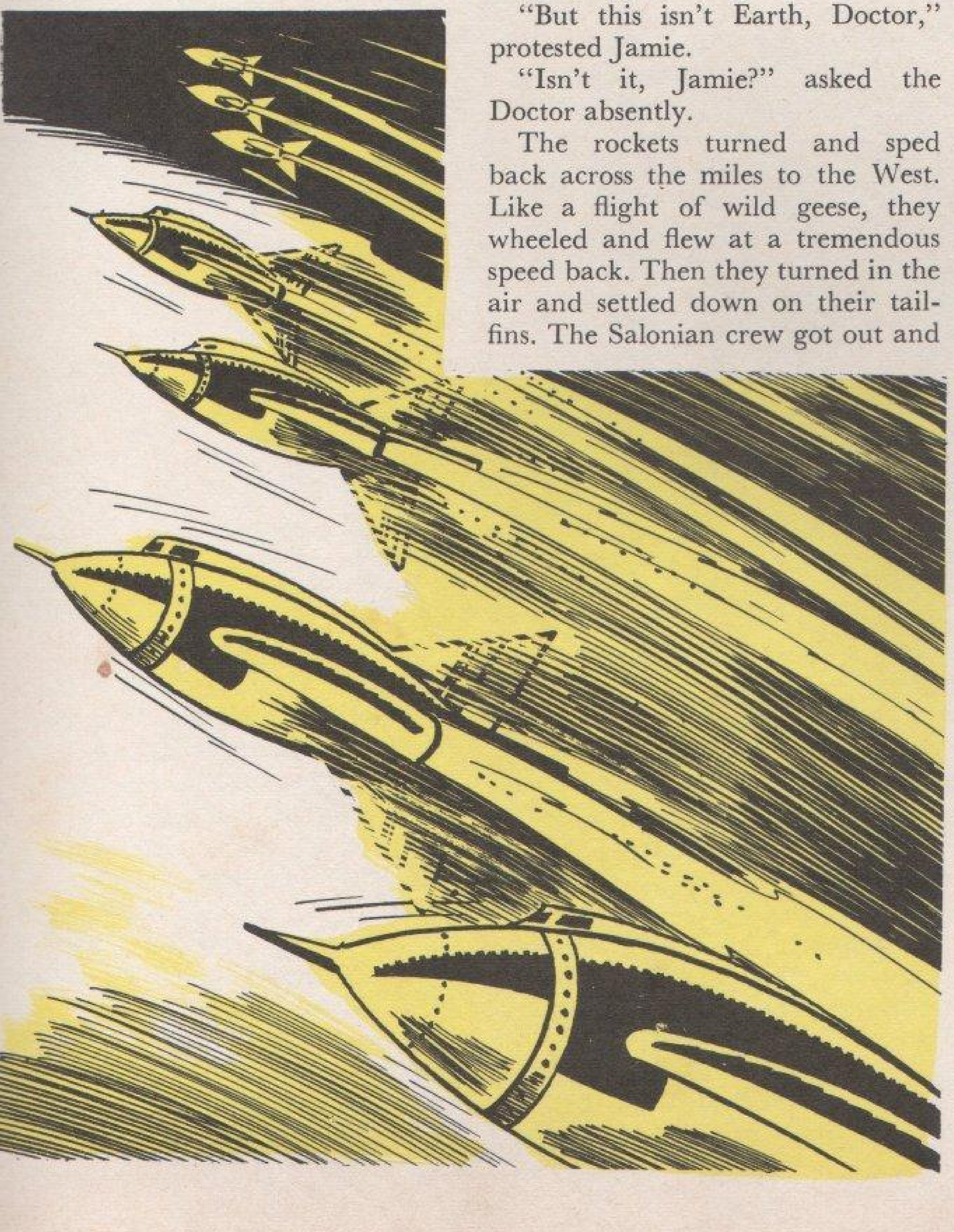
But he could no longer think along those lines, for now the Salonians were becoming excited. Already the Eastern continent was coming into view. And—it shone like ice or like a mirror! The rocket sped on over the great globe of glass, extending as far as the horizon. The great fleet, in formation, traversed that glass half-globe, swerved and swept back over it, and the faces of the Salonians showed a marked change.

For the half-globe of glass was quite unbroken. All round the horizon it glittered, with never a crack nor a break. There were no buildings and no hills, mountains and rivers. Not a foot of soil was to be seen.

"Where now are the Colonians, your enemies?" asked Dr. Who sharply. "Where are those 'fiends' you claim destroyed your continent so long ago. Who has destroyed *them*?" He stared with horror at the great round hump of glass that was the Eastern Hemisphere, the result of many thousands of nuclear explosions in saturation attacks.

The Salonian king made no reply, but his haggard eyes stared from the window at the glinting landscape.

"I never saw it," he muttered. "None of us ever saw it . . . like this! It comes back to me now. After that long, long sleep I had forgotten. We pressed the buttons and this—this was the result. We sent one manned rocket to see and when it came back the crew shot themselves after they had reported the success of the multiple strike. We did not dare to go and see for ourselves, but we went into our glass capsules, long prepared as a war measure. We were ashamed to live, yet fearful to die and face the god against whom we had committed the unforgivable sin. We will return now. Our cobalt bombs were here before us, so many long and weary centuries ago."



"What does he mean, Doctor?" whispered Victoria, timidly. She was as frightened as could be, and even the irrepressible Jamie was, for once, stricken dumb in the face of such a universal disaster.

"Perhaps I'll tell you, sometime," said Dr. Who slowly. "I may even never tell you. It's a dreadful story, children. Men on Earth used to foretell that something like this would happen if they did not learn to live in peace."

"But this isn't Earth, Doctor," protested Jamie.

"Isn't it, Jamie?" asked the Doctor absently.

The rockets turned and sped back across the miles to the West. Like a flight of wild geese, they wheeled and flew at a tremendous speed back. Then they turned in the air and settled down on their tail-fins. The Salonian crew got out and the king addressed the waiting multitude.

Dr. Who saw the *Tardis* where they had left it and he nudged Jamie and Victoria. "Go to the ship," he said in a low voice. "Have her ready for take-off."

"Why are we leaving, Doctor?" demanded Jamie. "These people must be most wonderful people, with all the technology of ages at their disposal. We could learn lots from them, Doctor."

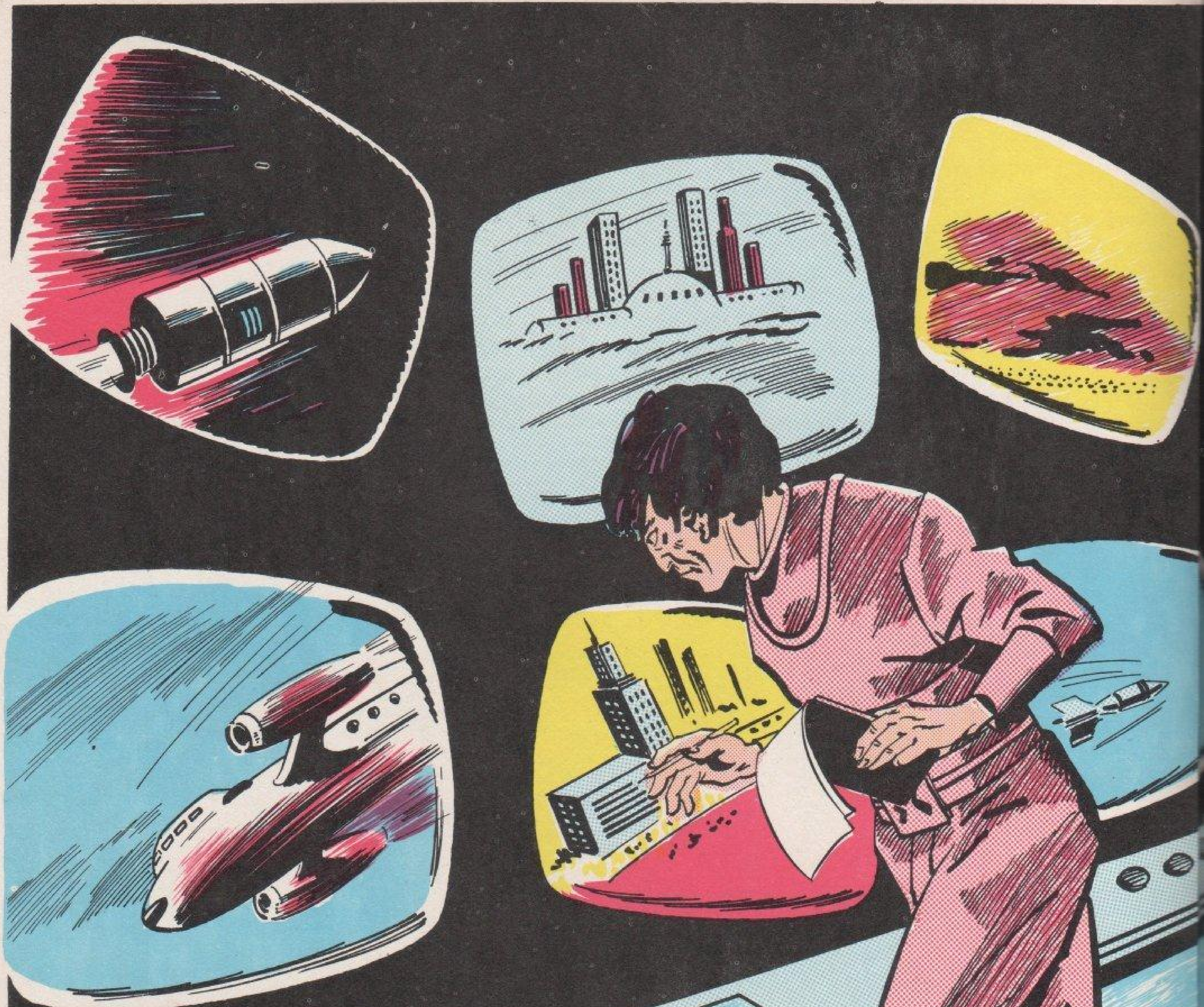
"Yes, Jamie," said the Doctor heavily. "They learned *everything* but the one main thing. They have forgotten how to live in peace together. They have no solution to that problem, so they are taking the only way out they know. They fear to die and face their Life God. So. . . .

"I remember," said Victoria. "People on Earth used to say that mankind might some day destroy all living things if a nuclear war came."

"And mankind did that very thing, Victoria," said the Doctor steadily. "We are back on Earth again, children, millions of years into its future. The old sun became nova and, in the explosion, Earth was cast away into Space to be caught up by this new pale star. Mankind, even in the face of such a cosmic disaster, could not unlearn the lesson taught him by cruel evolution. Mankind must always fight against itself. Look! The Salonians—which branch of humanity on Earth they descended from, we will never know—are going back again to the only thing left to them short of race suicide."

In the doorway of the great temple they watched the people, so recently awakened, lie down again in their glass caskets and pull the lids over them. Then History repeated itself exactly. Their friend, the Salonian king, went up to the altar and they saw him throw the switch to 'Rest'. A shot rang out and he fell across the altar, dead.

"To the *Tardis*, children," said Dr. Who solemnly. "I feel as though someone is walking over my grave. These sad, lonely people are our own descendants. Who knows what they will find when next they wake up, if indeed they ever do wake up again on this unhappy planet."



WINDOWLESS, the room was in darkness except for the glow from a half-dozen TV screens placed at what seemed to be random angles.

Dr. Who, in a close-fitting silver uniform, paced up and down before the screens. He had a notebook in his hand, in which he made notes as he checked the shifting pictures on the sets. There were pictures of stars and space-ships, paramecia and people.

His task completed, he crossed briskly to where a bank of instruments blossomed with winking lights and pulsing valves.

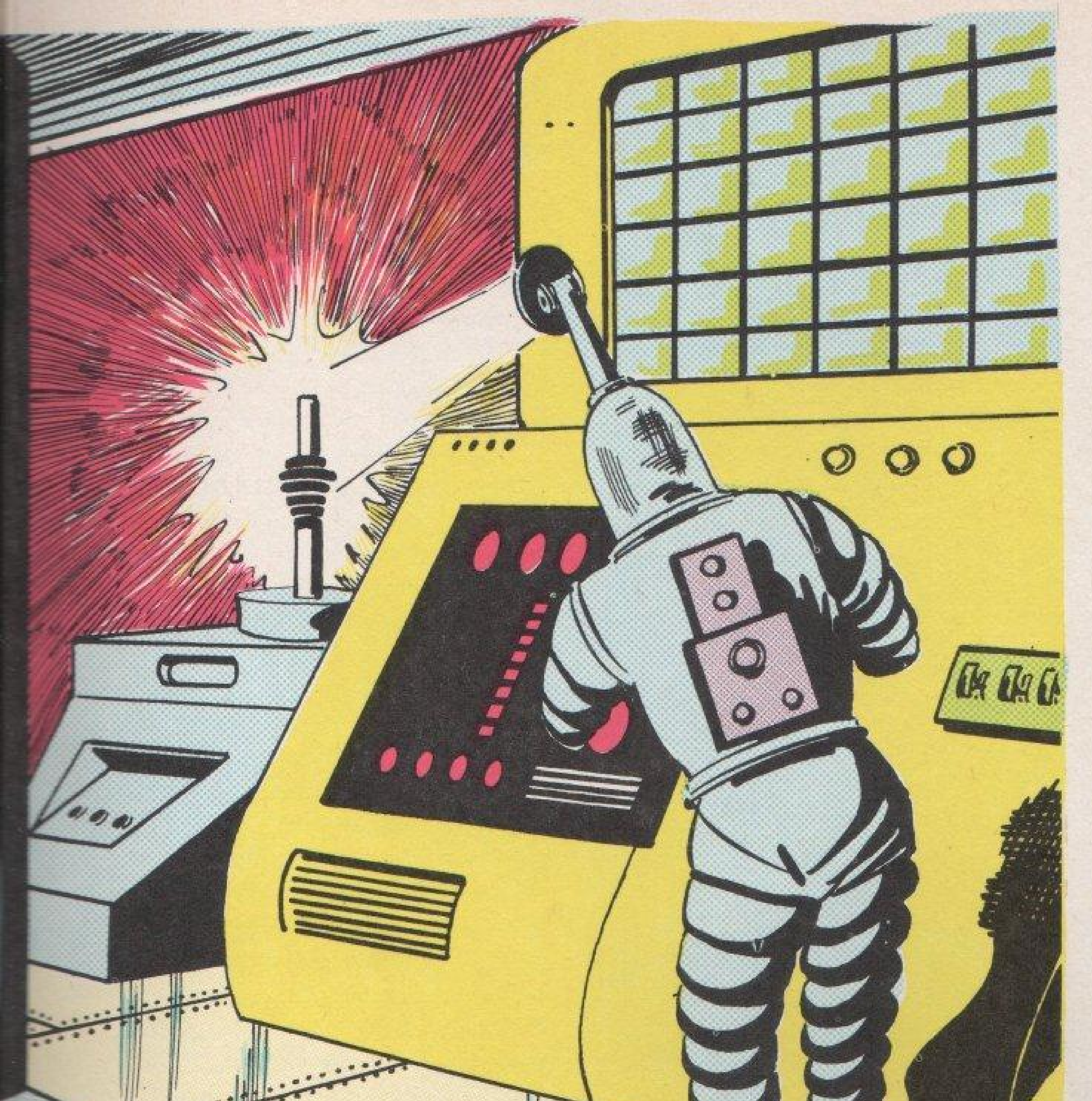
Dr. Who looked over the console of the complex control-panel. He spoke to the Controller. "Master, my report shows that the Omega waveband is dissipating at speed—except for the south-west Ovoidian group, where the build-up registers forty ohms."

The Controller did not look up. He did not have to, for he was a robot with a single eye-beam that swivelled from a protruding shaft.

The flat, electronic voice of the robot answered: "You have done well, Hegg. You may go."

Dr. Who bowed. He walked woodenly away to a small ante-room, where he exchanged his silver work-suit for the rainbow-hued Plistra, an outfit consisting of tights and cloak, favoured by most of the working class on the Planet Krill.

But he felt no excitement at the thought of going back to his cubicle. Strangely enough he felt nothing at all. He thought of the job he had just left; he thought of the Controller, Robot X; he thought how lucky he was to work for such a Master. . . . But there his thoughts ended. His brainwashed mind had no past and no future. . . .



HAPPY AS QUEEG

He stepped out of the building on to the moving sidewalk. It was teeming with Plistra-clad beings like himself, moving silently and staring before them with vacant eyes.

At every corner a robot police guard scanned the workers with high-frequency Truth beams. Suddenly there were two of the squat steel figures waiting for Dr. Who in the shadows of a tall building. Before he could protest they had grabbed him by the arms and hustled him away down a service tunnel.

He did not struggle much. "Masters—what is wrong?" he asked sadly. "I am happy to work for the robots . . . as happy as Queeg."

The robot police let go of his arms. They reached up steel feelers and unscrewed their glistening metal heads. As the "heads" came away from the figures, the heads-and-shoulders of Jamie and Victoria were revealed.

The two young faces were wreathed in smiles.

"Oh, Doctor! It's marvellous to find you safe and well!" sobbed Victoria, her voice somewhat muffled by the plastic helmet she wore.

"What in the world happened to you?" asked Jamie. "We waited for hours after you'd left *Tardis* to explore the planet. Then we put on the ray-foil helmets and began to hunt for you."

Victoria took up the tale: "We hunted for days. We had almost given up in despair when we came across your music-pipe in the sand. We realised you must have dropped it on purpose, to point the way that the robots had taken you. . . ."

"So we followed. We sneaked into the city. We—er—borrowed a couple of robot 'skins' so that we could walk around unobserved. And then we spotted you!" added Jamie.

Dr. Who stared at them with uncomprehending gaze.

"I am as happy as Queeg!" he said again.

Jamie snorted impatiently. "And who is Queeg?" he began. "Why don't you——"

He broke off as Victoria grabbed his arm. She drew him to one side and whispered: "Don't you see—he doesn't know us! He stares like an automaton! Something must have happened to him!"

Jamie looked closer at their companion. "Great guns—you're right!" he exclaimed. "Poor old Dr. Who! The robots have brainwashed him!"

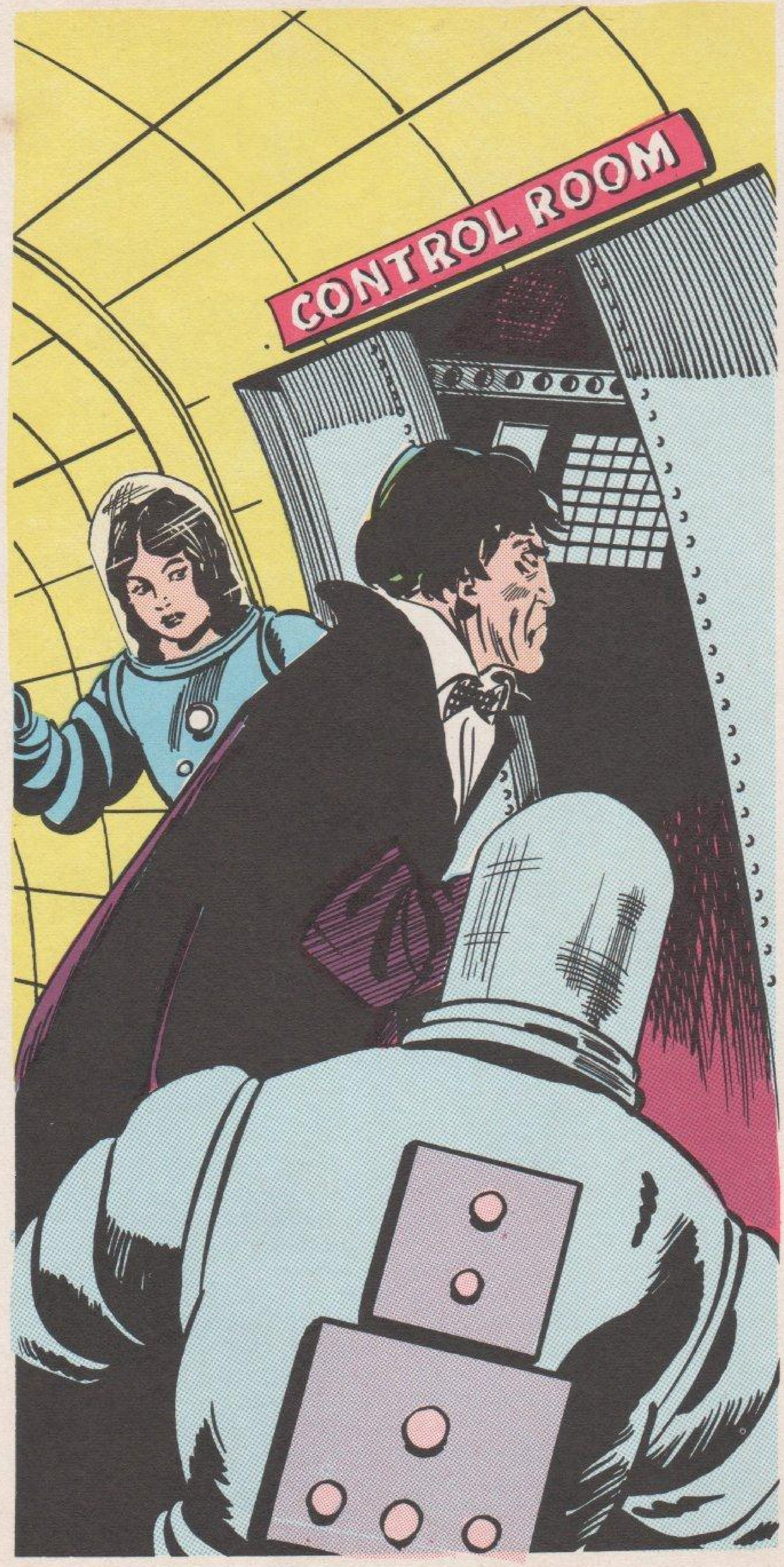
Dr. Who was fidgeting about uneasily. "May I go now, Masters?" he asked. "I must report back for duty to the Controller, Robot X, soon."

"Now take it easy, Doctor!" said Jamie soothingly. "We'll get you back to normal. What you need is a ray-foil helmet. . . . Here, have mine!"

He slipped the plastic hood from his head. With the help of Victoria he then fastened the helmet over Dr. Who's head.

They stepped back and watched anxiously. A puzzled expression spread over the other's features. Then he looked at his companions and said: "Victoria! . . . Jamie! . . . I—where—what's been happening? I remember leaving *Tardis,* and meeting some robots . . . but I can't recall anything that happened since."

Victoria bounded forward and hugged him impulsively. "Oh, thank heaven you're all right, Doctor! The robots must have been using some



kind of a slave-ray on you. . . . Look at your clothes! You've been living in the robot city, and working for someone called the Controller."

Dr. Who clasped his hands excitedly. . . . "The Controller! Yes! It's coming back to me now! He's the robot who has control of the slave-beams. . . ."

"And Queeg?" queried Victoria. "You kept saying you were 'as happy as Queeg'!"

"Did I?" said Dr. Who. "Perhaps Queeg is the very top robot."

Jamie picked up his robot-head, glancing uneasily down the service tunnel. "Come on! We mustn't waste time," he urged. "We've got to get you back to *Tardis*. We'll march you out of the city as if we are robot police taking a prisoner away."

"No!" The word exploded from Dr. Who's lips with such force that the other two stared. "I can't leave here without freeing these wretched slaves," he went on. "Somehow I've got to get my hands on the control-board, and smash the control that these monsters have gained."

Jamie and Victoria glanced at each other and shrugged. They knew better than to argue with the Doctor when he spoke in that crusading tone of voice. . . .

A few moments later Dr. Who emerged from the service tunnel. He rejoined the mindless masses on the sidewalks . . . but this time he was moving back the way he had come.

Around him lay the capital city of the Planet Krill. Metal trees lined its roads. Towers rose splendidly towards the skies, with thousands of less ambitious structures in between.

He stepped off the moving sidewalk into the vast Control Building. He paused to glance behind. Two robot police were stalking at his heels. The Doctor allowed himself a little grim smile before turning to check through the Security Robots with their delicate sensitisers.

He got through all right, and a few moments later he was standing before the doors of the control-room. He stood in front of it until an electro-encephalograph inside recognised his distinctive brain-wave pattern. Then it slid open, and he walked inside.

The Controller robot eyed him uncertainly with its single eye-beam. Dr. Who walked steadily across the gleaming metal floor, enjoying the confusion that his sudden reappearance was causing in the robot's electro-neuronic circuits.

"Hegg . . . Hegg?" The flat electronic voice kept repeating the name that had been given to the brainwashed Dr. Who after he had emerged from the Slave Brain Cubicle.

Dr. Who came closer. "I am no longer your mindless slave," he said. "I am going to smash the rule of the robots."

The Controller touched an alarm button. Red lights blossomed on the control-board and a high-frequency alarm sliced the air.

Now the robot had something definite to feed to its computer-brain. "Stop! I am doubling the strength of the slave-ray. You are Hegg and you cannot resist!"

"No!" said the other firmly. "I am not Hegg, and I *can* resist because I am wearing a ray-foil helmet."

The Controller lumbered to its feet. A panel slid open in the wall of its chest, revealing a bulbous weapon. . . .

ZZ-zzpt! The deadly ray hit Dr. Who at close range. He was enveloped in an eerie, eldritch aura of silvery light. . . . Yet he walked on!

When he came close to the robot, he raised his hands and thrust. Caught off-balance, the ungainly figure staggered sideways, then pitched across the control-panel. There was a blinding flash as the metal body caused short-circuits. . . .

For a few seconds the Controller twitched in a spray of sparks—then lay still amid the smouldering remains of the control-panel.

Dr. Who nodded, satisfied. Behind him he heard the heavy footsteps of Victoria and Jamie in their robot police disguise. As they entered the room he said jubilantly: "Success! The controls are smashed! The people are no longer slaves!"

"Is that the Controller?" shuddered Victoria, staring at the twisted and blackened heap of metal slumped over the control-board.

"What about Queeg?" Jamie wanted to know. "Any clues, Doctor?"

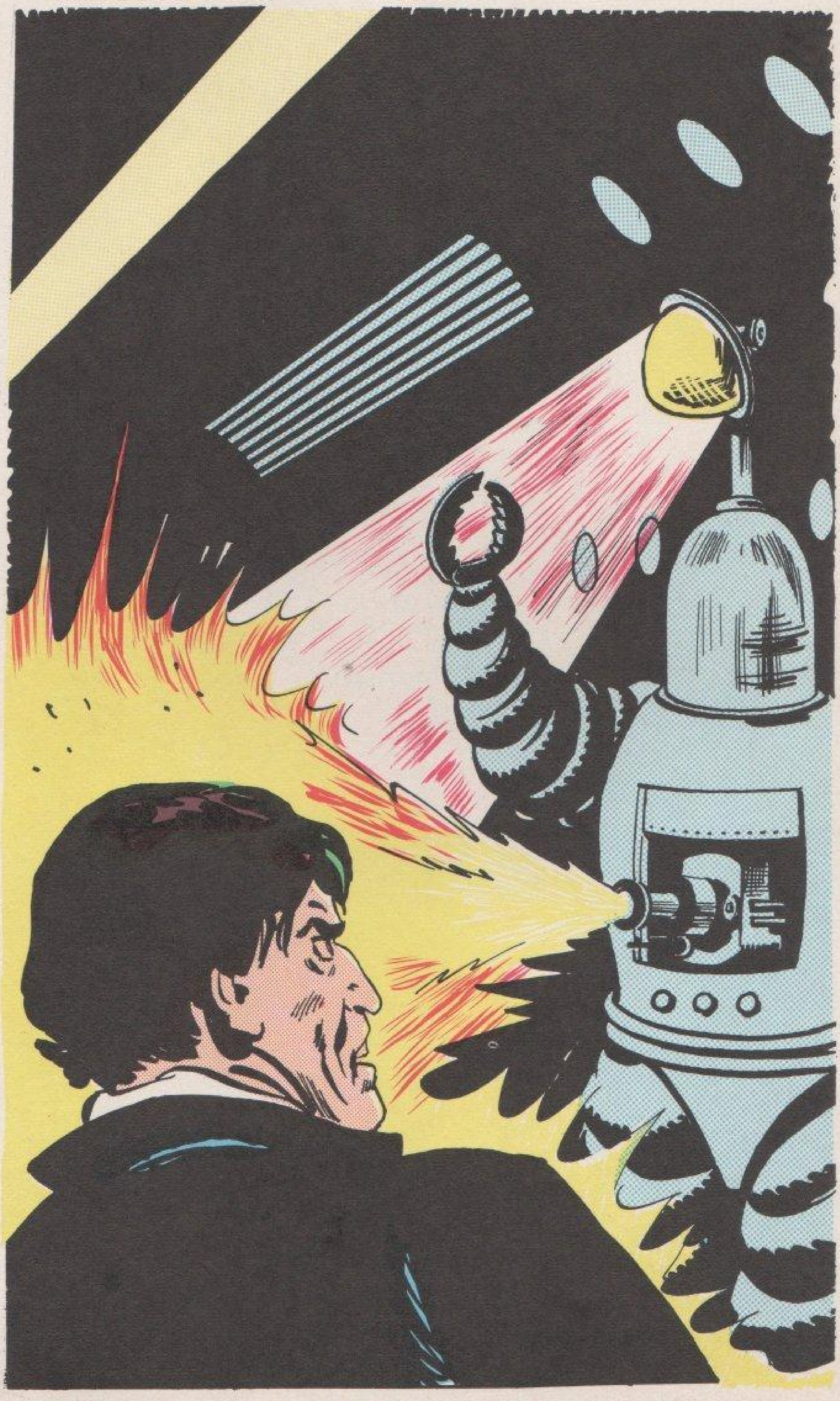
He shook his head. "No clues. . . . But I have a hunch Queeg is somewhere close at hand. . . . Come on!"

He led the way out of the room by an inner door. It led down a corridor. Dr. Who hurried ahead. The others, hampered by their robot suits, shuffled after him. . . .

At the end of the passage lay an opening which led to a vast hall, lit by flickering flames of hidden torches. It had the atmosphere of a place of worship.

Dr. Who walked fearlessly across the hall. Then he stopped short, and stared.

"Merciful heavens! So *you* are Queeg!" he exclaimed.



It was a grotesque sight, to rival any that he had witnessed in his countless voyages through Time and Space. . . .

Queeg—the master-mind of the robot rule—was nothing more than Brain . . . a huge shapeless mass of it, grey matter that pulsed with movement and seemed to be constantly in motion. Yet it was contained within the confines of a transparent container whose sides rose to the very ceiling. . . .

"Is that you, Hegg?"

The question burned in the Doctor's brain, and he realised that Queeg communicated by telepathy.

"You could have been happy if you had remained a slave . . . as happy as Queeg!" spoke the Brain in his head. "But you chose to rebel —and now I must destroy you! Farewell!"

The grey mass suddenly shuddered and glowed with vital energy. Dr. Who staggered and fell as if he had been dealt a wicked blow.

"Ah!" he panted. "So you are trying to kill me with Brain Power. . . . Well, two can play at that game."

He crouched, his face grim, concentrating all the power of his mighty brain. . . . Then began a fantastic duel of the Brains. With the power of thought alone, they dealt each other blow after mighty blow.

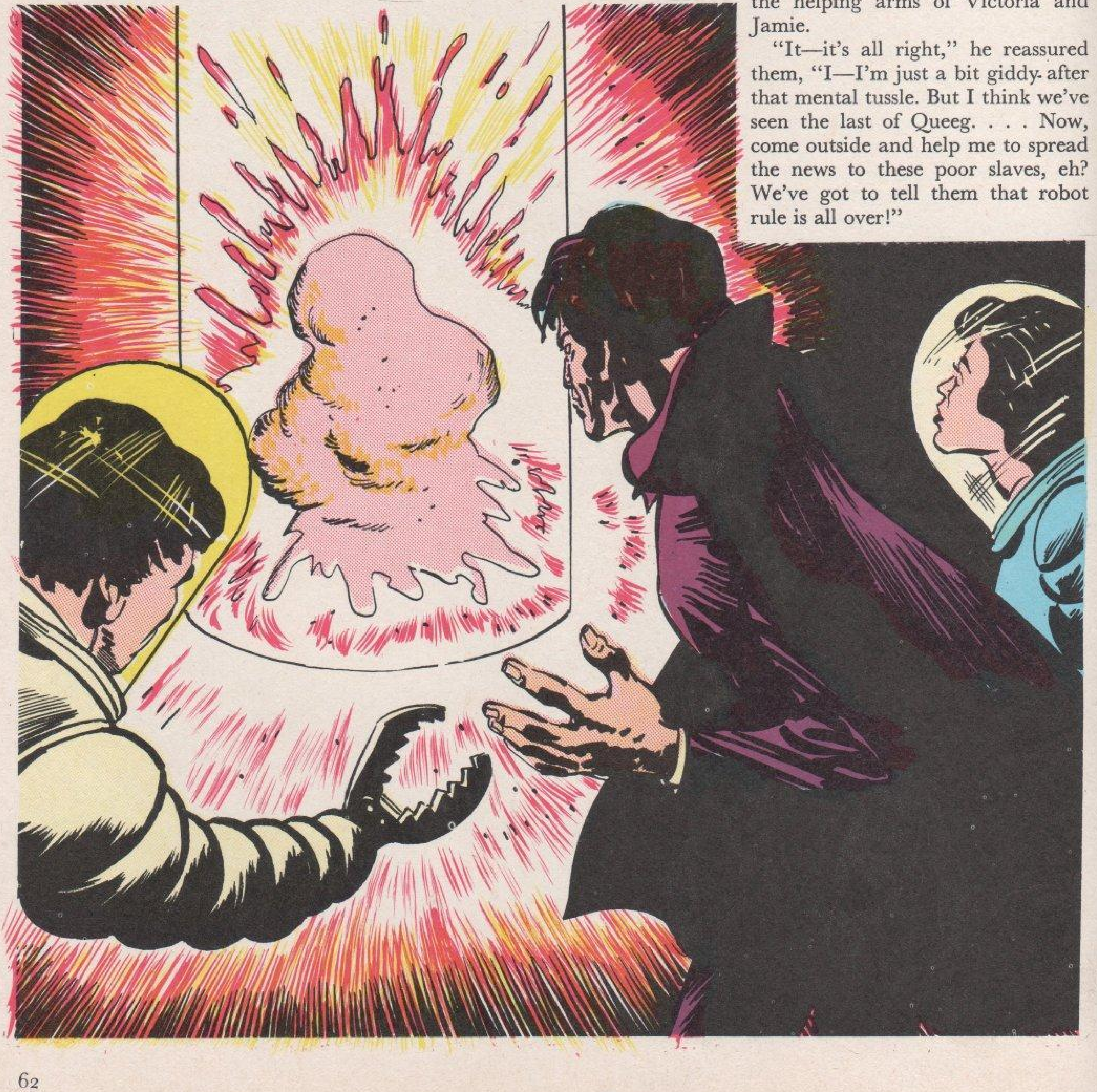
Suddenly a dreadful wail escaped the juddering mass inside the container. . . . "*Aa-aa-aah!*"

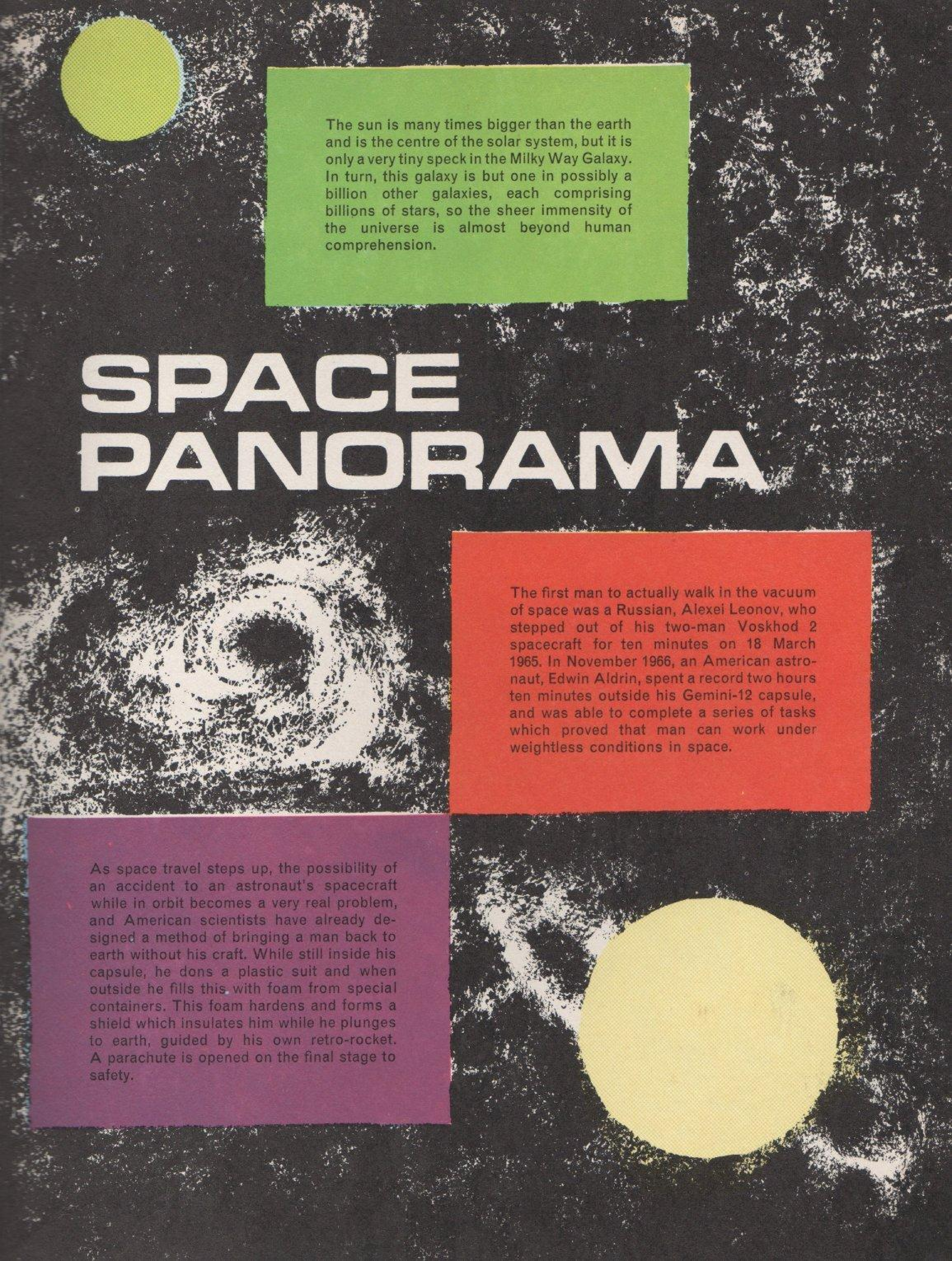
The Thing began to thresh about wildly—but Dr. Who held out, pouring on the brain pressure.

Then, quite suddenly it was all over. The Brain shrivelled into an inert mass.

Dr. Who raised a hand to his forehead, and would have fallen but for the helping arms of Victoria and Jamie.

"It—it's all right," he reassured them, "I—I'm just a bit giddy after that mental tussle. But I think we've seen the last of Queeg. . . . Now, come outside and help me to spread the news to these poor slaves, eh? We've got to tell them that robot rule is all over!"





The sun is many times bigger than the earth and is the centre of the solar system, but it is only a very tiny speck in the Milky Way Galaxy. In turn, this galaxy is but one in possibly a billion other galaxies, each comprising billions of stars, so the sheer immensity of the universe is almost beyond human comprehension.

SPACE PANORAMA

The first man to actually walk in the vacuum of space was a Russian, Alexei Leonov, who stepped out of his two-man Voskhod 2 spacecraft for ten minutes on 18 March 1965. In November 1966, an American astronaut, Edwin Aldrin, spent a record two hours ten minutes outside his Gemini-12 capsule, and was able to complete a series of tasks which proved that man can work under weightless conditions in space.

As space travel steps up, the possibility of an accident to an astronaut's spacecraft while in orbit becomes a very real problem, and American scientists have already designed a method of bringing a man back to earth without his craft. While still inside his capsule, he dons a plastic suit and when outside he fills this with foam from special containers. This foam hardens and forms a shield which insulates him while he plunges to earth, guided by his own retro-rocket. A parachute is opened on the final stage to safety.

Venus is the nearest planet to earth, but because of dense cloud layers covering its surface astronomers can only guess at what lies underneath. The light of the sun reflects off these cloudbanks, with the result that Venus appears as the brightest star in the heavens, sometimes even visible during the day.

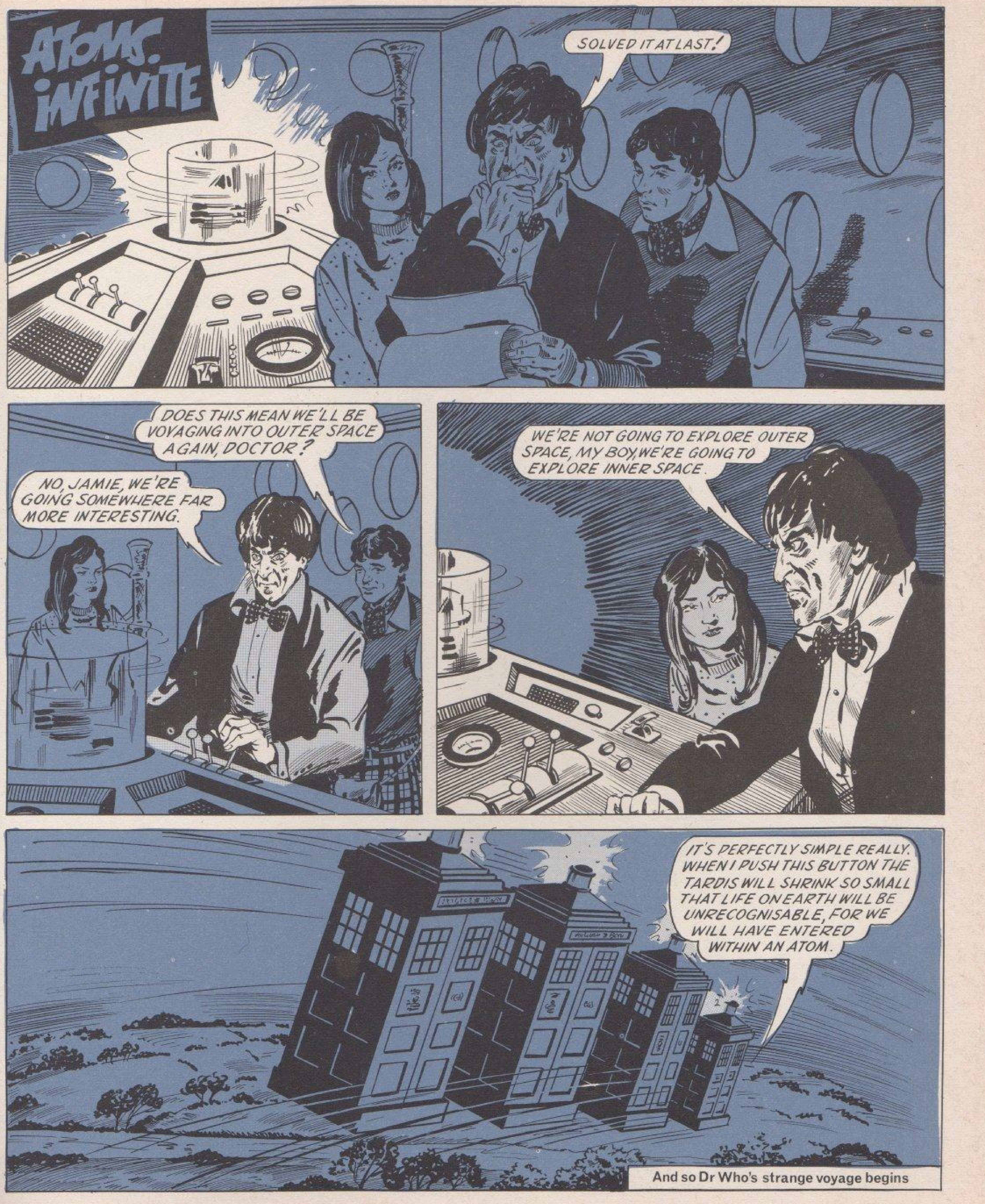
Just as the earth's gravity pulls at the moon, so the moons gravity pulls at earth. It is this pull that causes the tides—the rising and falling of the oceans' level. As the moon travels round the earth it causes the oceans to bulge towards it, and when the bulge reaches the seashore it is known as high tide.

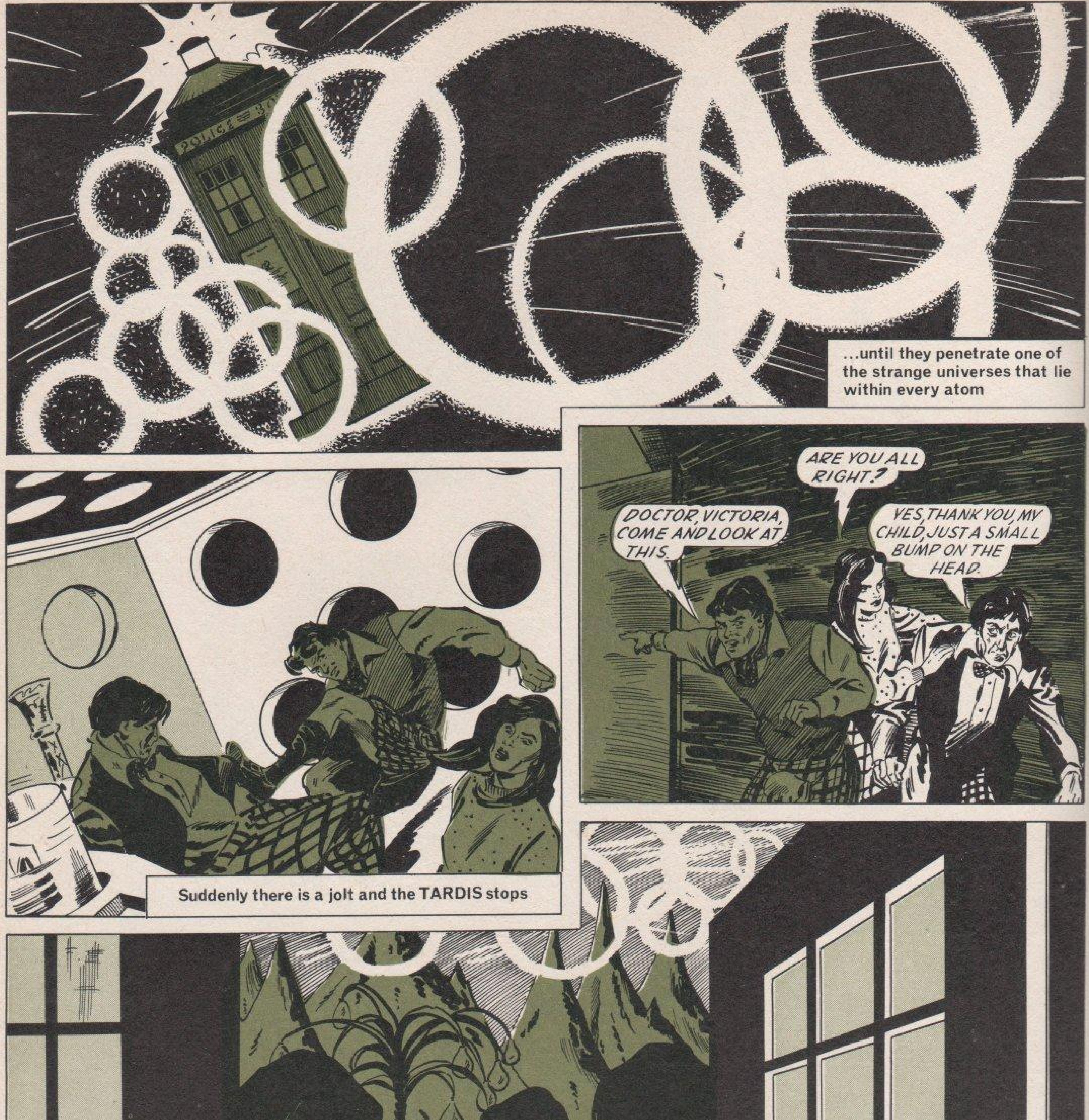
The difference between astronomy and astrology is often found confusing. The first, astronomy, is the oldest of all sciences and is the study of the heavenly bodies, their nature, movement and position. Astrology, though it too is concerned with the stars, is a pseudo-science which is used to predict the course of events by noting the positions and movements of the stars and planets.

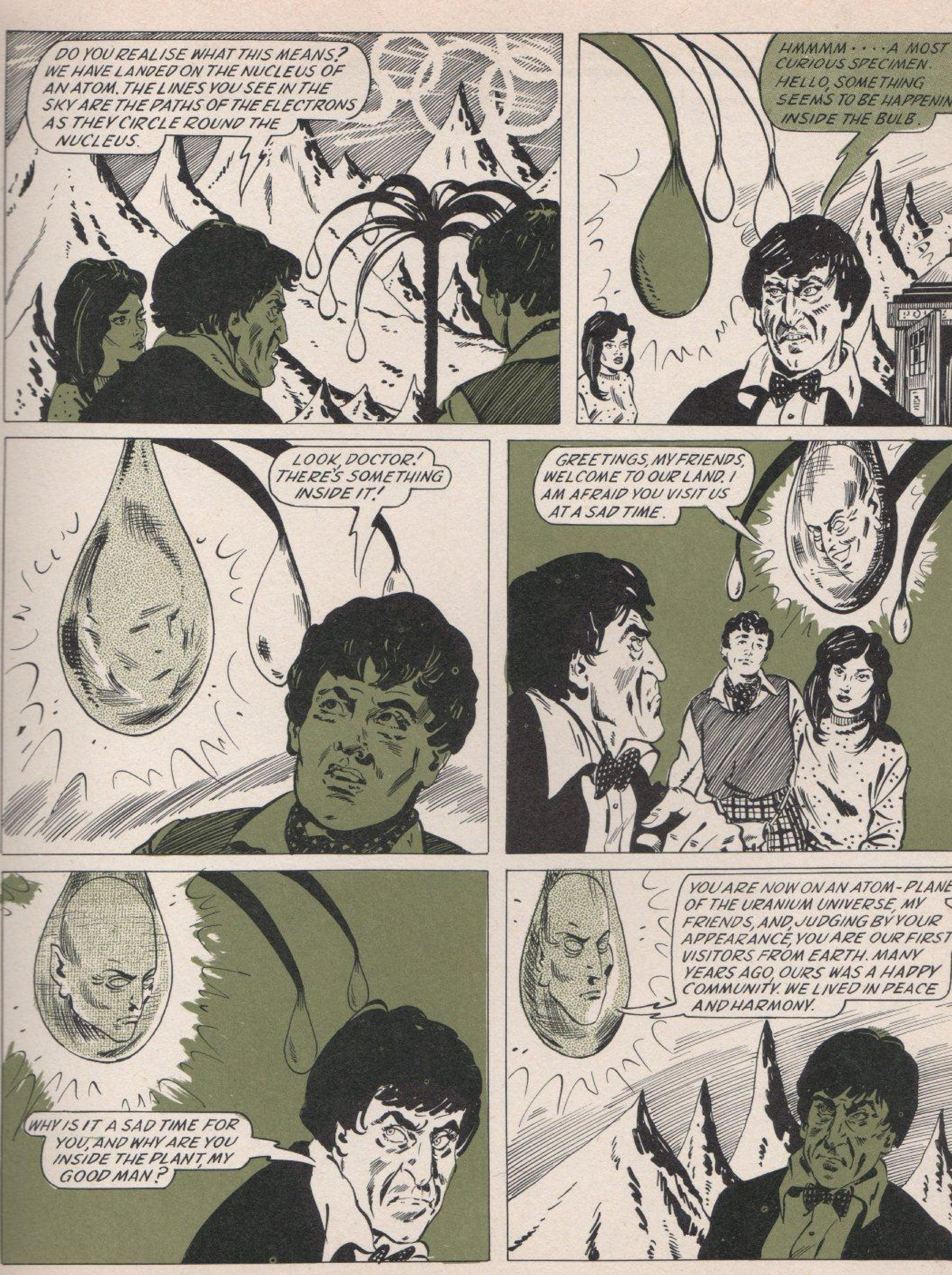
Meteorites, hunks of rock or metal that travel through space, often strike the earth's atmosphere and are usually burnt up by the intense friction. Sometimes, however, they are so large that only a fraction of their surface is destroyed and then they hit the earth with terrific force. One such meteorite fell in northern Siberia in 1908 with such force that it was felt as an earthquake 50 miles away. Fortunately, no one lived in the immediate vicinity of the impact.

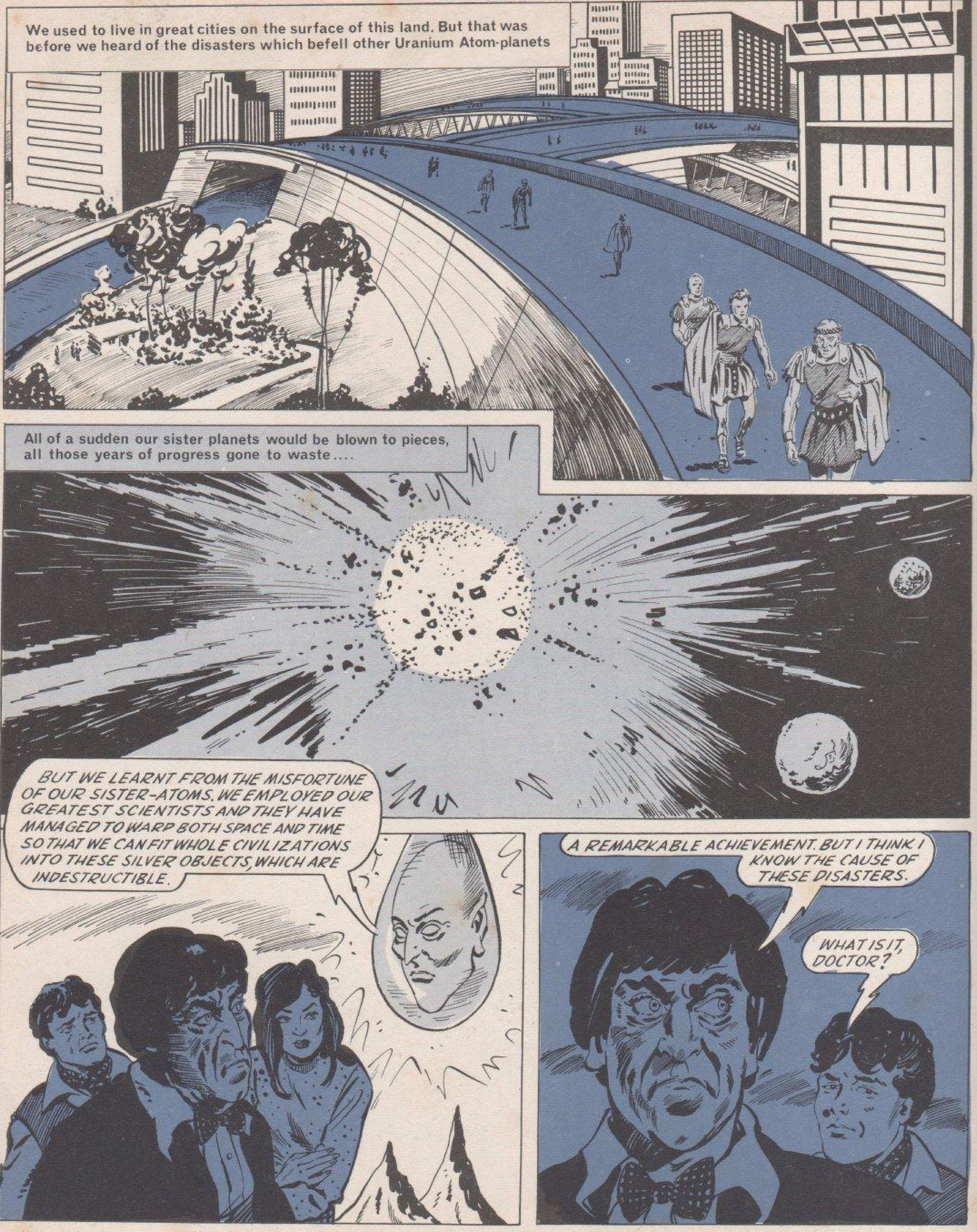
Nicholas Copernicus (1473-1543) was the first great modern astronomer. He put forward the theory that the planets, including the earth, revolved round the sun, and that the sun was therefore the centre of the universe. This was not published until after his death because he knew it would create an uproar.

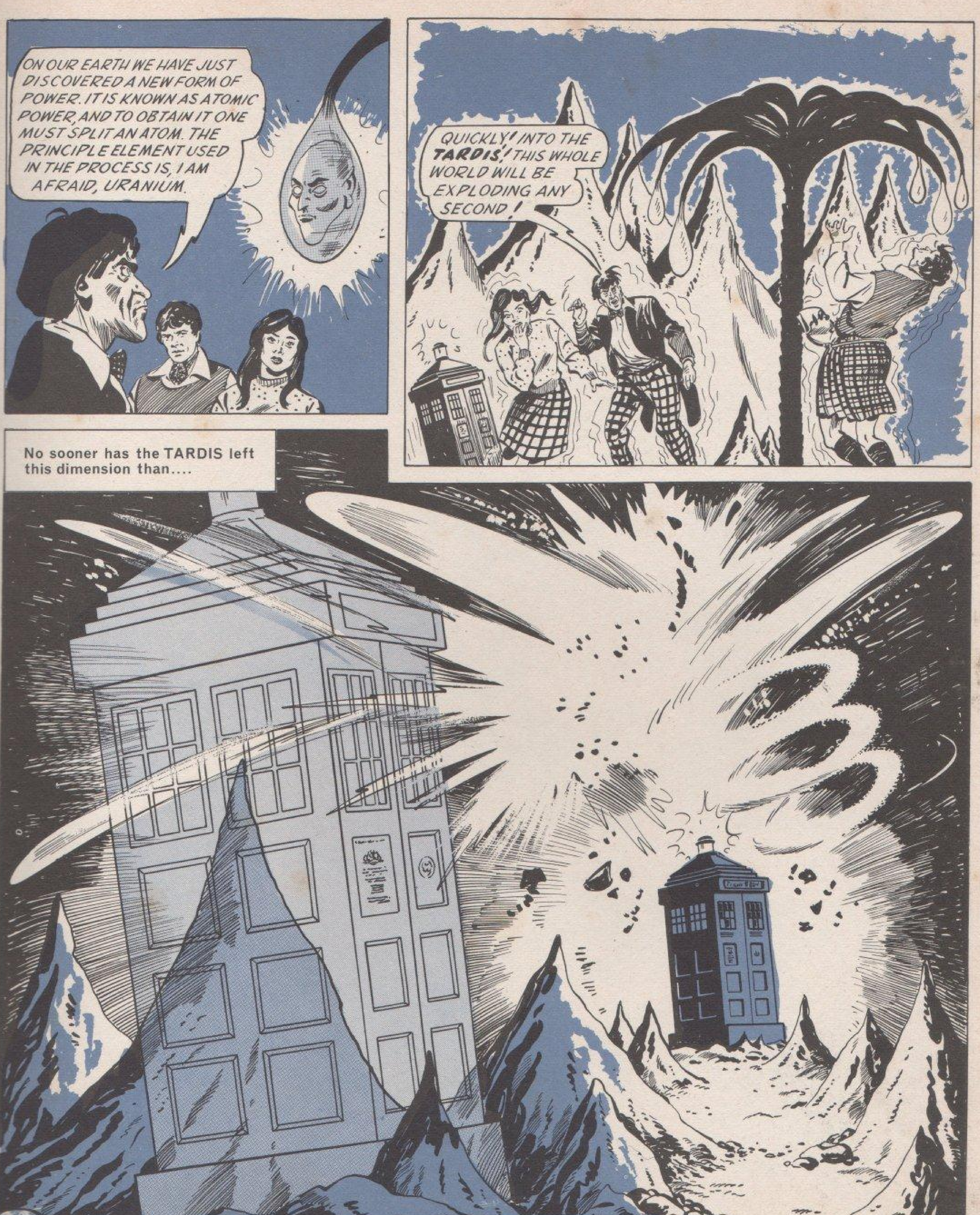
ATOMS INFINITE

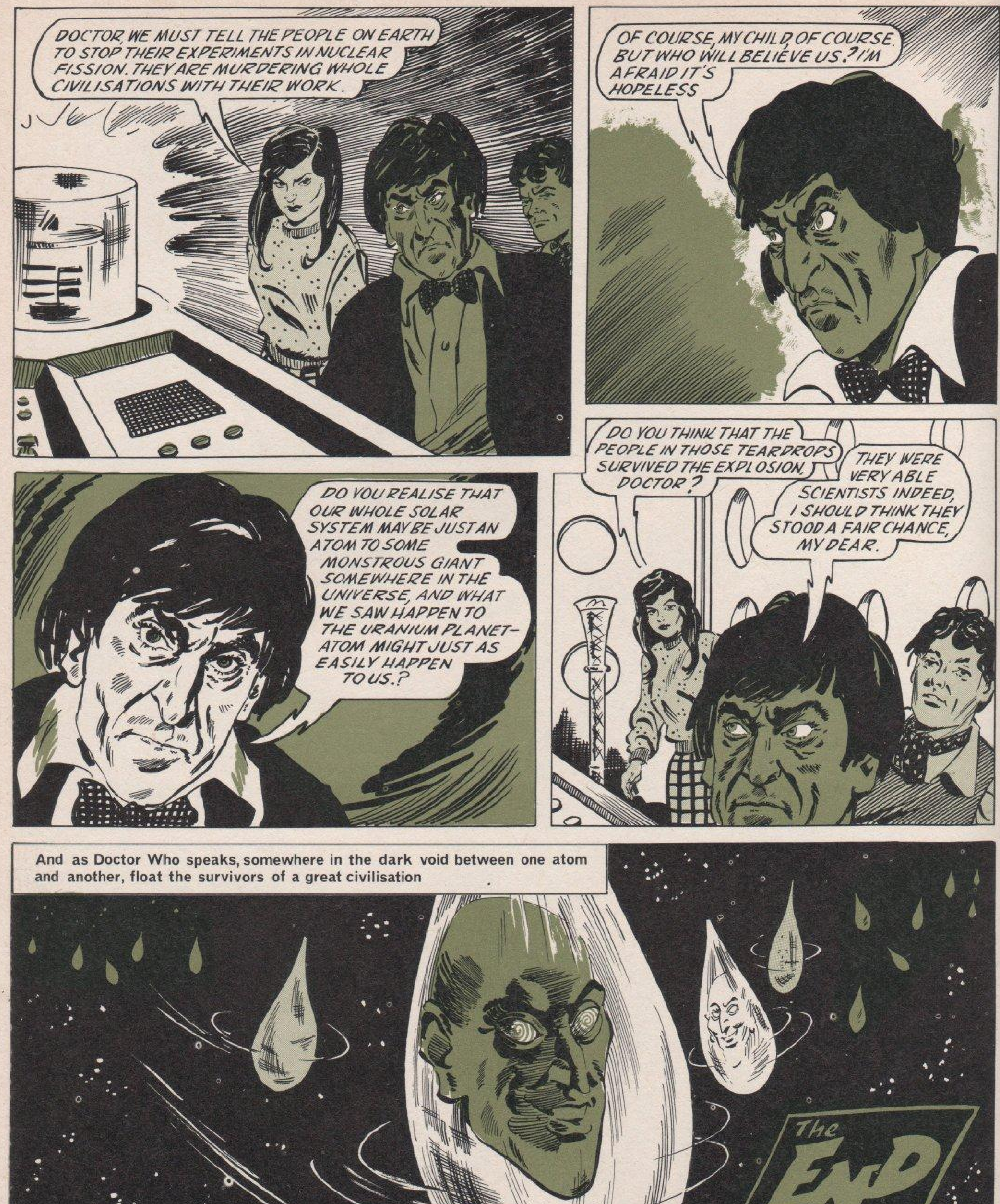

SOLVED IT AT LAST!
DOES THIS MEAN WE'LL BE VOYAGING INTO OUTER SPACE AGAIN, DOCTOR?
NO, JAMIE, WE'RE GOING SOMEWHERE FAR MORE INTERESTING.
WE'RE NOT GOING TO EXPLORE OUTER SPACE, MY BOY, WE'RE GOING TO EXPLORE INNER SPACE.
IT'S PERFECTLY SIMPLE REALLY. WHEN I PUSH THIS BUTTON THE TARDIS WILL SHRINK SO SMALL THAT LIFE ON EARTH WILL BE UNRECOGNISABLE, FOR WE WILL HAVE ENTERED WITHIN AN ATOM.
And so Dr Who's strange voyage begins


...until they penetrate one of the strange universes that lie within every atom
Suddenly there is a jolt and the TARDIS stops
ARE YOU ALL RIGHT?
DOCTOR, VICTORIA, COME AND LOOK AT THIS.
YES, THANK YOU, MY CHILD, JUST A SMALL BUMP ON THE HEAD.


DO YOU REALISE WHAT THIS MEANS? WE HAVE LANDED ON THE NUCLEUS OF AN ATOM. THE LINES YOU SEE IN THE SKY ARE THE PATHS OF THE ELECTRONS AS THEY CIRCLE ROUND THE NUCLEUS.
HMMMM . . . . A MOST CURIOUS SPECIMEN. HELLO, SOMETHING SEEMS TO BE HAPPENING INSIDE THE BULB.
LOOK, DOCTOR! THERE'S SOMETHING INSIDE IT!
GREETINGS, MY FRIENDS, WELCOME TO OUR LAND. I AM AFRAID YOU VISIT US AT A SAD TIME.
WHY IS IT A SAD TIME FOR YOU, AND WHY ARE YOU INSIDE THE PLANT, MY GOOD MAN?
YOU ARE NOW ON AN ATOM-PLANET OF THE URANIUM UNIVERSE, MY FRIENDS, AND, JUDGING BY YOUR APPEARANCE, YOU ARE OUR FIRST VISITORS FROM EARTH. MANY YEARS AGO, OURS WAS A HAPPY COMMUNITY. WE LIVED IN PEACE AND HARMONY.

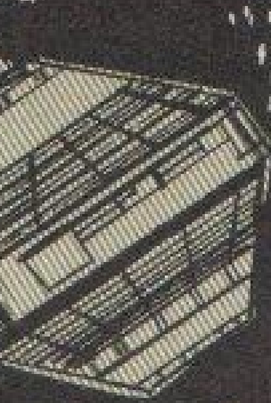

We used to live in great cities on the surface of this land. But that was before we heard of the disasters which befell other Uranium Atom-planets
All of a sudden our sister planets would be blown to pieces, all those years of progress gone to waste....
BUT WE LEARNT FROM THE MISFORTUNE OF OUR SISTER-ATOMS. WE EMPLOYED OUR GREATEST SCIENTISTS AND THEY HAVE MANAGED TO WARP BOTH SPACE AND TIME SO THAT WE CAN FIT WHOLE CIVILIZATIONS INTO THESE SILVER OBJECTS, WHICH ARE INDESTRUCTIBLE.
A REMARKABLE ACHIEVEMENT. BUT I THINK I KNOW THE CAUSE OF THESE DISASTERS.
WHAT IS IT, DOCTOR?

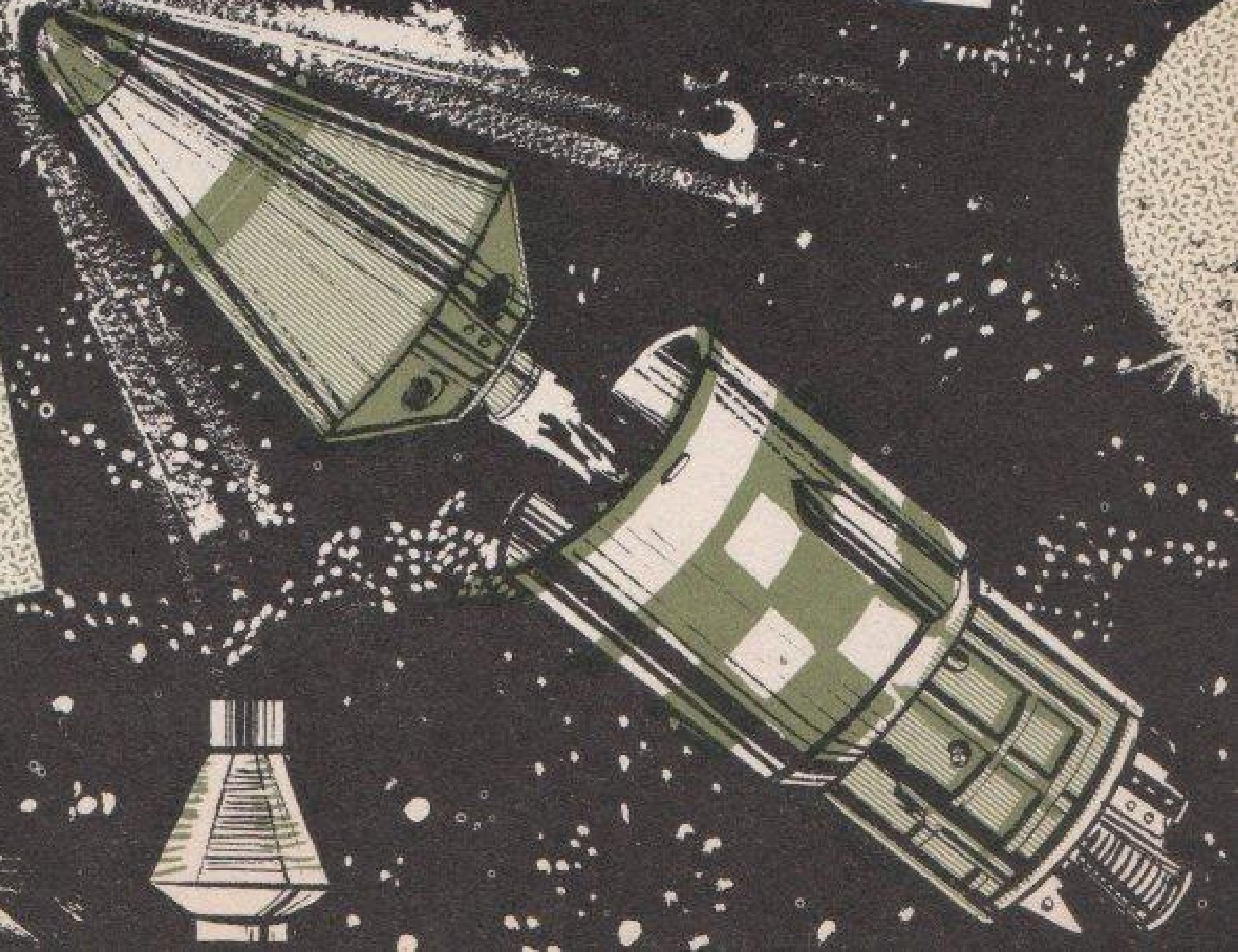

ON OUR EARTH WE HAVE JUST DISCOVERED A NEW FORM OF POWER. IT IS KNOWN AS ATOMIC POWER, AND TO OBTAIN IT ONE MUST SPLIT AN ATOM. THE PRINCIPLE ELEMENT USED IN THE PROCESS IS, I AM AFRAID, URANIUM.
QUICKLY! INTO THE TARDIS! THIS WHOLE WORLD WILL BE EXPLODING ANY SECOND!
No sooner has the TARDIS left this dimension than....


DOCTOR, WE MUST TELL THE PEOPLE ON EARTH TO STOP THEIR EXPERIMENTS IN NUCLEAR FISSION. THEY ARE MURDERING WHOLE CIVILISATIONS WITH THEIR WORK.
OF COURSE, MY CHILD, OF COURSE. BUT WHO WILL BELIEVE US.? I'M AFRAID IT'S HOPELESS
DO YOU REALISE THAT OUR WHOLE SOLAR SYSTEM MAY BE JUST AN ATOM TO SOME MONSTROUS GIANT SOMEWHERE IN THE UNIVERSE, AND WHAT WE SAW HAPPEN TO THE URANIUM PLANET-ATOM MIGHT JUST AS EASILY HAPPEN TO US.?
DO YOU THINK THAT THE PEOPLE IN THOSE TEARDROPS SURVIVED THE EXPLOSION, DOCTOR?
THEY WERE VERY ABLE SCIENTISTS INDEED, I SHOULD THINK THEY STOOD A FAIR CHANCE, MY DEAR.
And as Doctor Who speaks, somewhere in the dark void between one atom and another, float the survivors of a great civilisation
The END

DOCTOR WHO'S PLANET QUIZ

1. Which is the smaller of the planets Pluto and Mercury?
2. Which large planet takes twelve years to orbit the sun?
3. Which planet's volume is 800 times that of the earth, while its mass is 100 times lighter?
4. Which is the nearest major planet to the earth?
5. Which planet was discovered by its gravitational pull on Neptune?
6. Which planet has five moons, two of which are Titania and Oberon?
7. Le Verrier, the French scientist discovered which planet by a mathematical calculation?
8. Which is the nearest planet to the sun?
9. Which planet is also called the Evening Star and the Morning Star?
10. How many moons has the planet Jupiter?

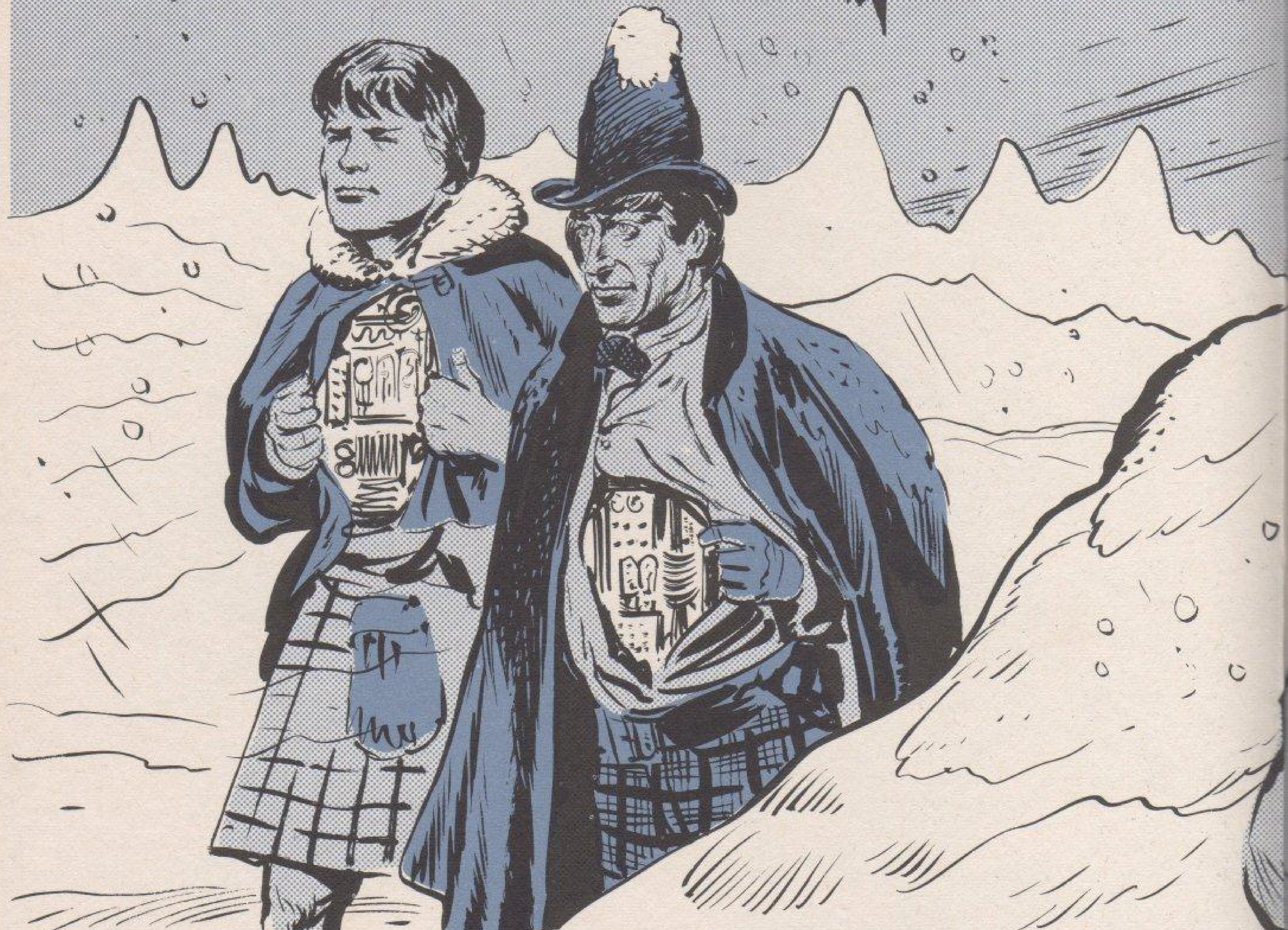




ANSWERS

1. Mercury; 2. Jupiter; 3. Saturn; 4. Mars; 5. Pluto; 6. Uranus; 7. Neptune; 8. Mercury; 9. Venus; 10. Twelve.

World of ICE



VICTORIA was tired of looking at the snow drifting down across the vision screens of the *Tardis*.

She was lonely too—and a bit scared. She had every reason to be all of these things. For she was all alone in Dr. Who's wonderful Time-and-Relative-Dimensions-in-Space craft. *Tardis*, as it was called, had materialised upon the snow-clad slopes of a mountain chain. Both Victoria and Jamie, the Doctor's two young fellow-travellers, had been in favour of shipping out at once. For wherever they might materialise next time, it could not fail to be more promising than the ice-bound wilderness that showed in the vision screens.

But Dr. Who had other plans. His instruments showed that this was the Planet Pendant—a place he had always wanted to explore. So he and Jamie had ventured outside to look around. . . .

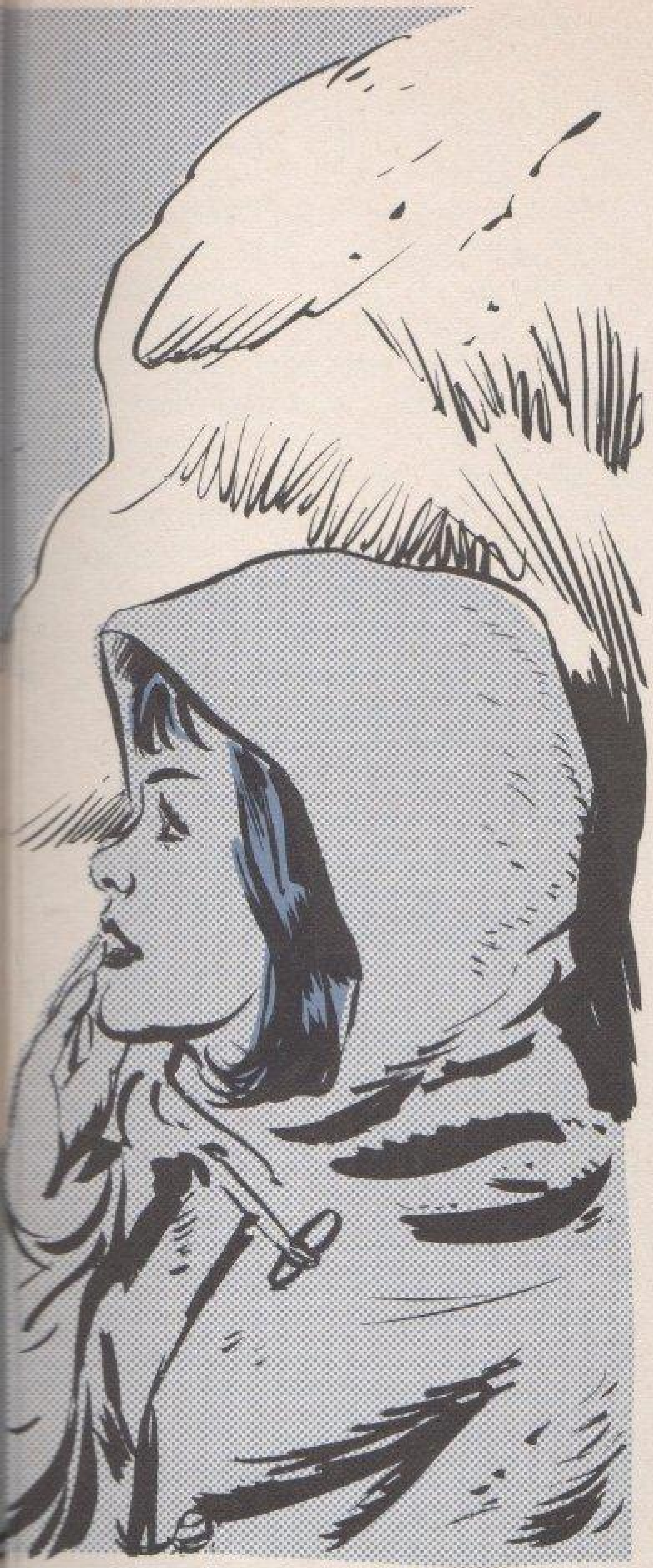
"Three hours they've been gone," said Victoria aloud. "This is ridiculous. . . . They promised they would just go a short distance and be right back!"

The sound of her own voice only made it worse. "I wish they'd come back," she thought.

It was no use looking at the vision screen. The snow-bound peaks only made the outlook seem bleaker. So she decided to bolster up her spirits. She still had a little of the perfume she had brought with her from Earth, and she was just about to put some on when her eye fell on the nearest vision screen. She gave a glad cry: "Oh! Thank goodness! They're back!"

The untidy figure of Dr. Who could be seen standing outside the *Tardis*. There was snow on his tall hat, and his face was half hidden in the Arctic jacket. Jamie stood beside him, hunched inside his jacket and looking rather miserable.

"Why doesn't he come inside?" thought Victoria. She ran to the control-panel and pulled the switch that operated the doors of the ship. They opened slowly, for snow had piled high against them in drifts. She



shivered as the icy blast swept inside.

"Oh, do come in—quickly, before I freeze to death!" she cried, as her companions came slowly inside.

Dr. Who looked around in a searching way. It was almost as if he was seeing the inside of the *Tardis* after a long absence. Jamie was staring around him, too.

"Oh, for goodness sake!" The long wait had exasperated Victoria. "Take off your things and get warm. Then you can tell me where you've been and what you found."

Dr. Who spoke for the first time. "We can do better than that! We'll *take* you and *show* you!"

She looked at him aghast. "Oh no! You don't really want me to venture out into that blizzard? Why, it was *you* who suggested I had better wait here until you and Jamie got back."

Dr. Who shrugged. "Yes, but now that I am sure the planet is friendly, I want you to come with us and meet the inhabitants. They're called Cogwens, and they are a charming, friendly race of beings."

Victoria glanced at the vision screen and shivered. "You call it a friendly place? I never saw any place as bleak and unwelcoming," she protested.

Jamie gave a short laugh. "Stop arguing, Vicky, and put your outdoor clothes on," he said. "It's great fun—honest!"

Unwillingly she did as they asked. When she was wrapped in the warm Arctic suit designed by the Doctor, they stepped outside into the snow.

"Aren't you going to lock the doors?" asked Victoria in surprise, seeing the others turn and plod away.

"No! Leave them!" snapped Dr. Who over his shoulder. "Come!"

Victoria hurried after them. The blizzard had ceased and there was now unfolded below an awe-inspiring vista of snow plains, ravines and peaks. But she had no thought for the grandeur of this bleak scene. Victoria was worried. There was something about the behaviour of her two companions which struck an oddly disquieting note.

They walked on in silence. That, in itself, was unusual. Dr. Who always kept up a running commentary when he brought his young friends to places he had visited before in space or time.

"I wonder. . . . Could something have happened to the Doctor and Jamie while they were away?" she thought. "Could they have been captured . . . and perhaps brainwashed?"

The idea frightened her. But she knew that she had to do something to prove it right or wrong.

"I know! I'll drop behind and hide!" she thought.

The Arctic suit she wore was all-white, and she could vanish from sight by dropping into the snow and covering her head.

She shortened her steps. The others drew further and further ahead.

"Now!" thought Victoria.

She turned and ran to the shelter of a snow ridge. Quickly she scooped out an alcove, and squatting in it she pulled her hood over her face.

A moment later she heard the shouts of Dr. Who: "Victoria! Where are you?"

Jamie was shouting too, and the noise drew nearer and nearer. Peeping out from under her hood she saw her companions only a few feet away. They had halted in a peculiar stiff pose. . . . "As if they were listening to some signal I can't hear!" thought Victoria.

Then she gasped with terror and amazement. For Dr. Who had pulled aside his cloak and his shirt—but instead of flesh beneath, there was the glowing bulbs and intricate wiring of a robot! She saw that Jamie had done the same. . . .

"They're robots!" she marvelled. "Robots made to resemble the Doctor and Jamie exactly—even to their voices!"

Then she saw why the two robots had bared their electronic chests. For in the centre of each complex mass of wires and bulbs there was a device like a radar-detector. Victoria recognised it at once: "They're equipped with a device for homing-in on me!" she guessed. "I've got to get out of here!"

With a quick movement she left her hiding-place and began to run. She heard the robots calling after her. Looking back she saw them following, their homing devices pointing directly at her.

It was a frantic chase, but fear lent Victoria extra speed. She was almost fifty yards ahead of her pursuers when she reached the foot of an ice-cliff. A glacier wall offered a handy screen. She dodged round it—and let out a piercing scream. . . .

Towering over her was a ghastly elongated creature with a long pointed snout. Its mangy fur was crusted with ice and it snarled and raised a single fore-leg to slash at the girl with razor claws.

"*Eugh-eugh-awww!*" The monster's shattering roar was still in Victoria's ears as her hand closed upon an object in her pocket. She drew it out and flung it into the creature's face.

"*Braw-aw-aw!*" With a howl of pain and fear the monster staggered back, clawing at its face. Then Victoria realised that she had flung her bottle of scent, and it had spilled into those gleaming red eyes.

The creature turned and fled, still howling with pain. It clawed its way straight up the wall of ice. But before it reached the top, Victoria heard the sound of the pursuing robots. She flung herself into hiding, just as her pursuers came into sight.

"Now I'm trapped!" she thought. "They're bound to find me with their detectors."

But to her amazement the two robot figures hurried *past* her hiding-place. They began to try and climb the sheer ice-face after the monster.

Then Victoria realised what had happened. "Good gracious! They weren't depending on vision to home-in on me. . . . they were using my scent to track me down! And now the monster is their target—just because he's drenched in my perfume!"

The robots did not seem to realise the impossible task of following the ice monster. Suddenly the Dr. Who-robot, which was in the lead, lost its balance. As it plunged down, it hit the second robot. The two mechanical figures hurtled to the hard-packed ice and shattered into several pieces.

Victoria rose to her feet. She was trembling a little. Gingerly she went closer to the shattered robots. But as she bent to examine the pieces, a faint sound made her whirl. . . .

Four squat figures—all smaller than herself—stood watching her. They wore uniform suits of protective covering that was highly polished yet pliable. In their hands they cradled strange tubular weapons. . . .

Yet there was nothing menacing in their attitude. As the girl stepped back in fear, they began to nod their badger-like heads and make soothing grunting sounds that seemed to be reassuring.

Suddenly Victoria found one of them speaking to her by telepathy. . . . "Don't be afraid! You have killed two of the Cogwens! You must be our friend!"

She answered by thinking her words clearly: "The Cogwens are your enemies?"

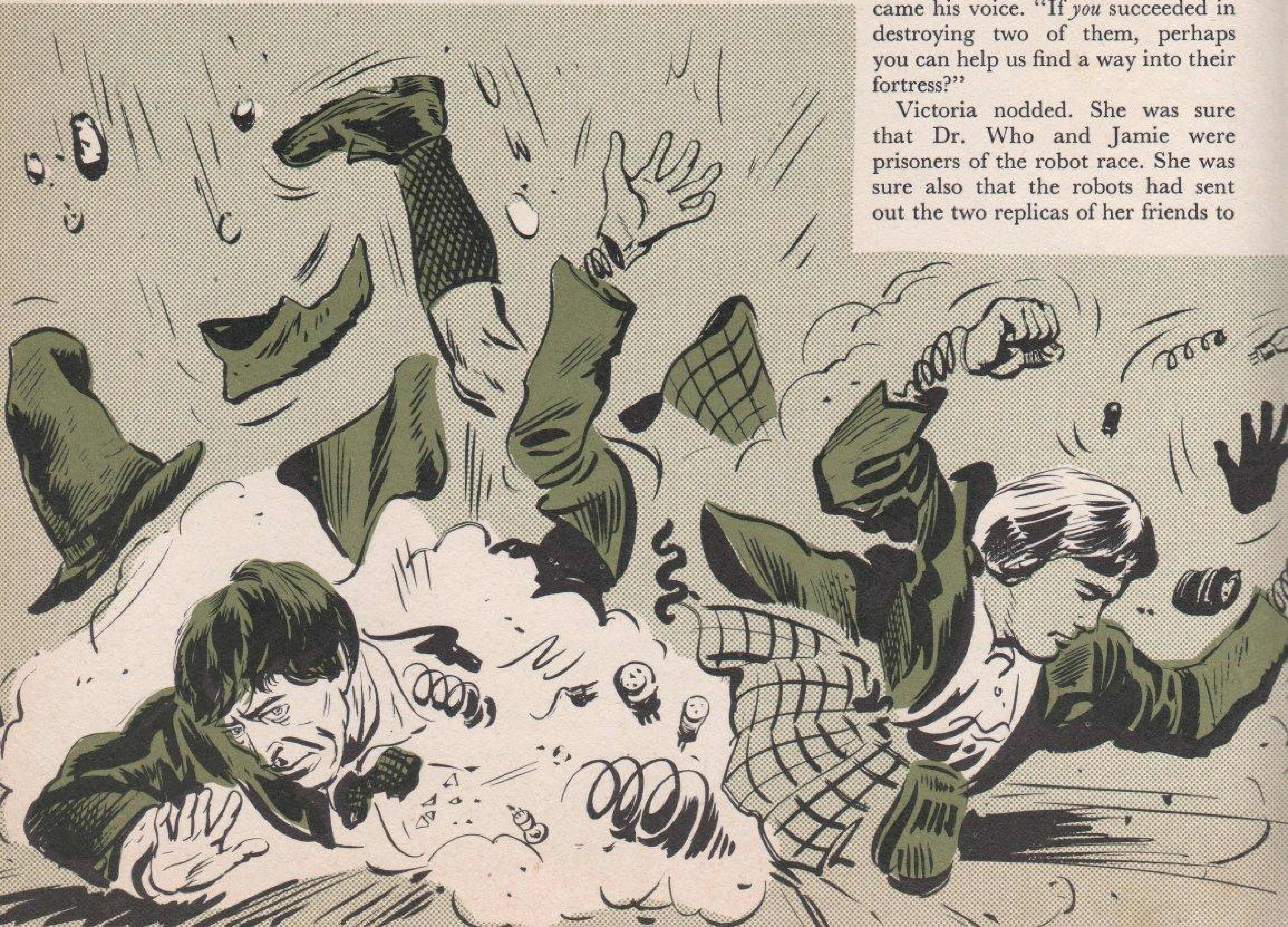
"Yes. We are the Morogs, the outcasts of the Planet Pendant. We are always hunted by the robot race of Cogwens, so we must live deep in the ice."

Victoria began to like these little nodding creatures. "It's a shame," she said. "Can't you fight them . . . after all, they're only robots!"

The voice in her head answered: "Do you not think we have tried? I, Ylit, have led my warriors many times against the citadel of the Cogwen. But it stands in an impregnable position on the Mountain of Ice."

Another of the Morogs stepped forward, grunting and lifting up his tubular weapon. "Our heat-rays are no use against the metal men, unless we fight them at close-quarters," came his voice. "If *you* succeeded in destroying two of them, perhaps you can help us find a way into their fortress?"

Victoria nodded. She was sure that Dr. Who and Jamie were prisoners of the robot race. She was sure also that the robots had sent out the two replicas of her friends to



lure her to the fortress, and to locate the time-and-space craft.

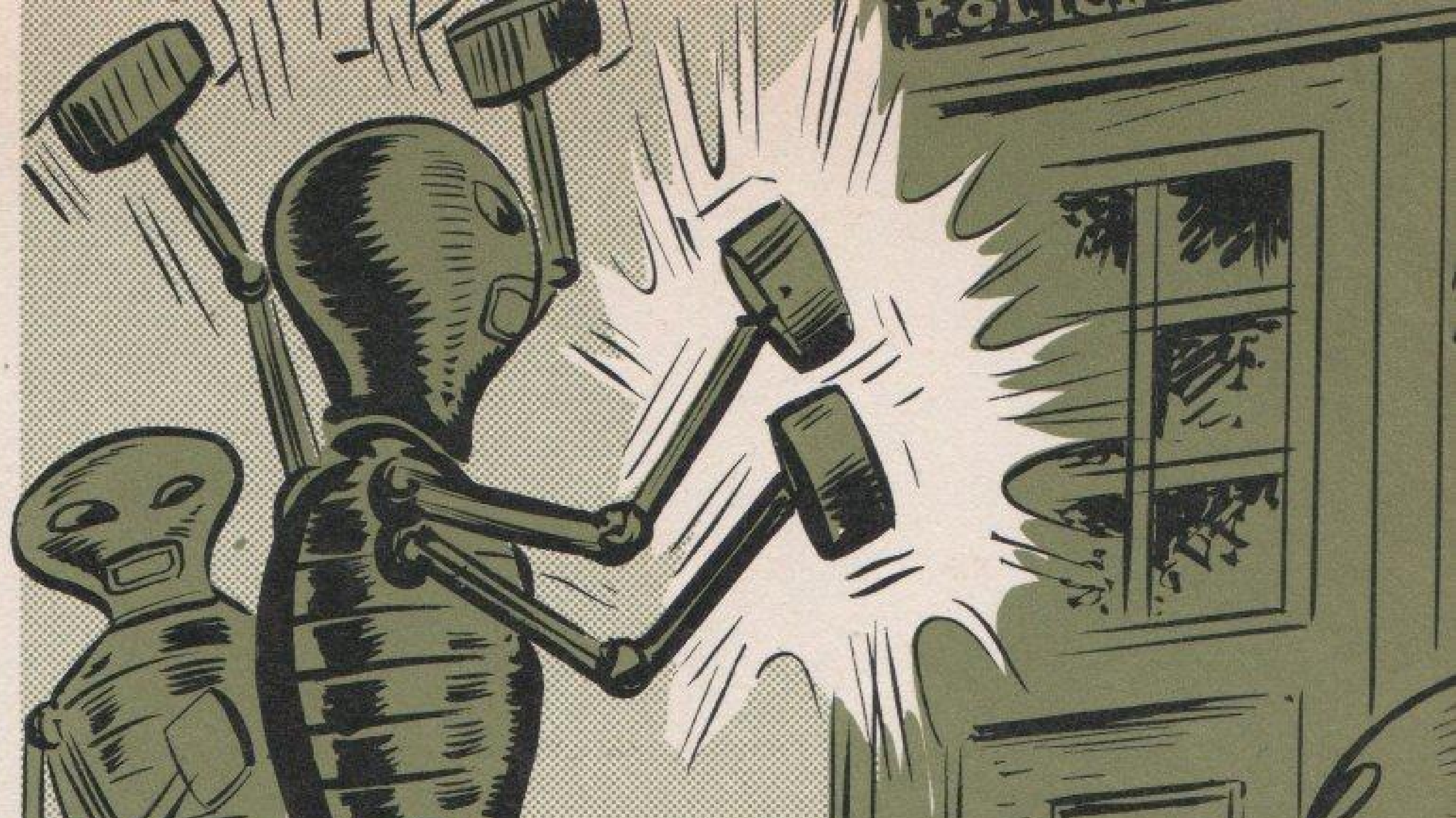
"Yes, I believe I've got a plan that might help," she said in her mind. "Can you send a message to the Cogwens' fortress so that it seems to come from these two," she added, pointing to the shattered robots at her feet.

"That will not be difficult," agreed Ylit. "What do you wish the message to say?"

Victoria pondered. "I want it to seem as if the message is being sent by these two, just before they fall. It must give the location of the *Tardis* ——"

"The what?" asked Ylit.

"Our time-and-space craft," she explained. "Come, I'll show you where it is."



Across the frozen slopes of Pendant marched a squad of heavily armed Cogwens. They marched in an unswerving line, looking neither to left nor right. Those at the rear of the column were carrying the shattered remains of the robots which had impersonated the travellers.

Suddenly a warning signal came from the leader, a massive four-armed robot. "There is the spaceship of our prisoners. . . . Surround it!"

"Yes, Jort!" boomed the others.

Tardis lay half-buried in snow. It appeared to be an ordinary, homely blue police telephone-box with its familiar flashing top light. The Cogwens looked at it doubtfully as they closed in. This was the most unlikely spacecraft they had ever encountered. They were not to know that the interior of *Tardis* did not exist in any normal world of size. The small square box contained a great spaceship laboratory, store-rooms and other quarters large enough to accommodate a small army, if necessary. . . .

Jort stood in front of the doors. There were no handles.

"I shall break it open!" boomed the robot leader.

His four jointed arms began to move like trip-hammers. . . . *Thud . . . thud . . . thud . . . thud!*

The doors remained as solid as ever. There was not even a mark from the terrific battering. . . . Then Jort turned his ray-gun upon the lock in an effort to force it open. Again he failed.

Impatiently the robot leader moved back. "Pick up the strange box and carry it back to the fortress!" he ordered.

The squad swarmed forward to hoist the time-spaceship on to their broad metal shoulders. Then, led by Jort, they marched back to their citadel. . . .

It was a fortress that reached towards the planet's three red moons with fifty sinister spires of glittering metal. Set as it was on top of the Ice Mountain it offered complete isolation, complete protection, complete mastery of Pendant.

The Cogwens set down their strange, shabby trophy in the centre of their great courtyard. From the laboratories came robot-scientists with tools to try and open the doors of the *Tardis*. . . . Electronic saws, galactic-hammers, sonic-decimators. . . .

When all these things failed, the Cogwens seemed to be baffled. They retired inside their fortress to consult their computor brain-machines.

The courtyard had been empty for barely a minute when the doors of the *Tardis* opened. Out poured a column of Morogs, led by Ylit. They fanned out quickly and rushed through the doorways into the laboratories of the stronghold.

Boom! Blam! Zzzst! The crash of their weapons rang out as the outcasts closed in mortal struggle with their robot conquerors.

Victoria listened anxiously as she crouched inside the doorway of the *Tardis*. Would her plan succeed? The idea had come to her as she remembered the story of the Trojan Horse. . . .

"The Morogs have surprise on their side—but are they strong enough to overpower the Cogwens?" she thought.

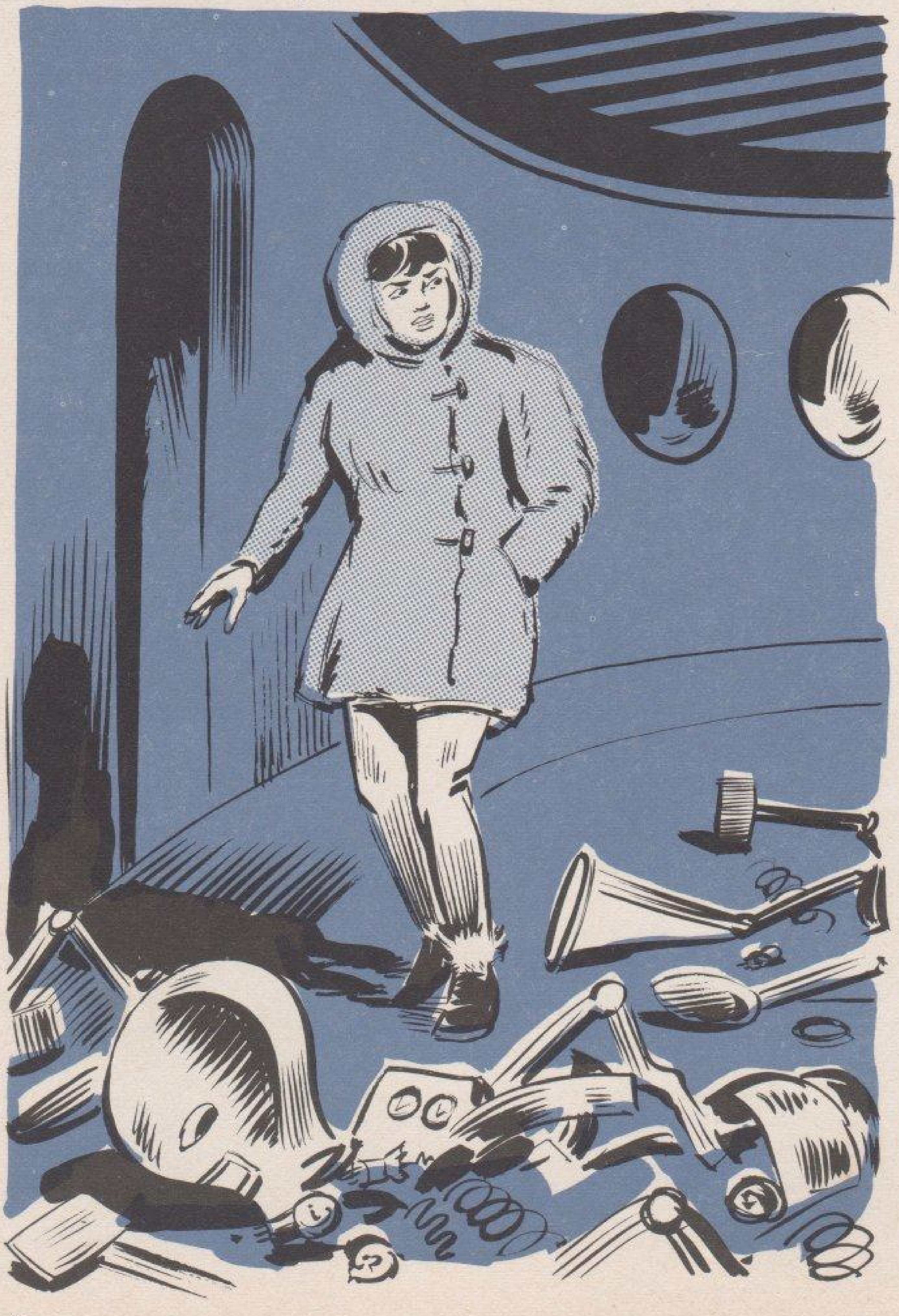
At last she could bear it no longer. Ignoring the instructions of Ylit that she should stay in the ship till the battle was over, she slipped out into the courtyard and ran for one of the doors.

The stench of the ray-guns was everywhere. The battle itself seemed to be in progress deep inside the gleaming citadel. She went cautiously down a corridor, stepping over the fallen figures of several Cogwens, their electronic innards spilling from their metal bodies.

Suddenly Victoria stopped. Her skin tingled with excitement. Somewhere close by two voices were shouting: "Help! Come and get us!"

Victoria knew those voices. "It's the Doctor and Jamie!" she cried.

She flew towards the door from which the shouts seemed to be coming. As she reached it, the door flew open and a Cogwen guard lumbered out. Its great metal arms made a grab for the girl, but she ducked and dodged between the straddled legs into the room. Like a flash she slammed the door. She saw a bolt, and dropped it into its socket.



"Victoria! Thank goodness to see you!"

She whirled with a gasp of relief at the familiar voice. "Dr. Who!"

He and Jamie were strapped into couches set amid tall opaque pillars that pulsed with light. As she rushed towards them, Dr. Who cried out: "Careful! Don't come near!"

As Victoria stopped, he went on: "This devilish device is able to read the brain and memory, and copy the body tissues."

"That's why the Cogwens were able to turn out robots that resembled us exactly," added Jamie.

"Then—what can I do to get you out?" wondered Victoria.

The scientist motioned with his head. "The control-panel is over there. . . . I've been studying it, and I think I know how it is operated. . . . If you deflect the centre dial to zero left, and at the same time push forward the three switches. . . ."

Victoria followed his instructions. A few seconds later the opaque pillars ceased to pulse with light. Then she was able to mount the dais and unstrap her companions from the couches.

At that moment the Cogwen guard outside began to batter down the door.

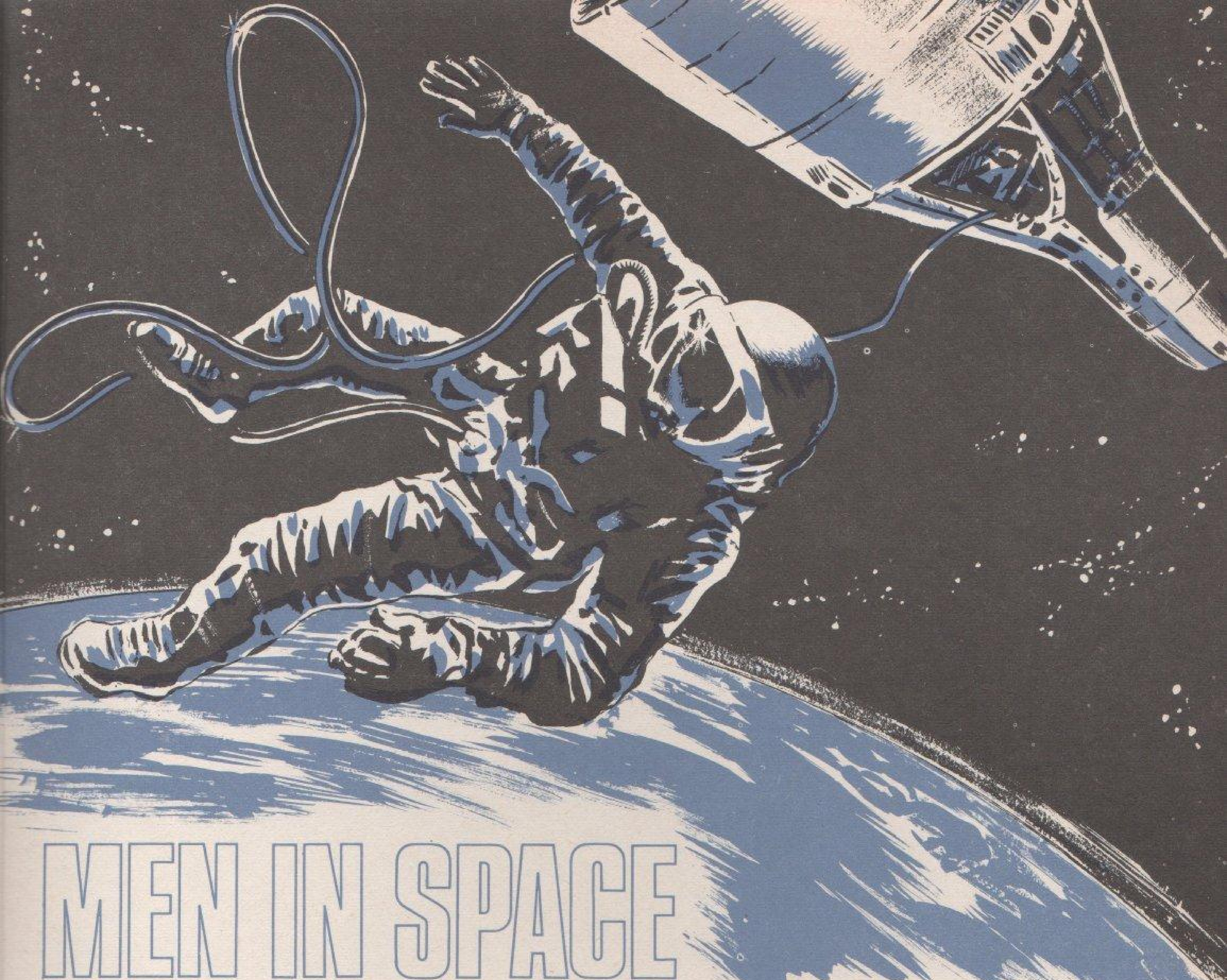
"Quickly!" cried Dr. Who. "There's another exit behind these screens."

They reached the courtyard and ran for the *Tardis*. The great doors closed behind them and Dr. Who began to operate the controls.

"I wonder if the Morogs will conquer the robot master-race," said Jamie, sprawling gratefully in a chair.

Victoria smiled. She was watching one of the vision screens, and just before it began to fade she saw Ylit emerge from one of the doors in the citadel, jubilantly waving his arms in the air.

"Don't worry, Jamie!" she murmured. "The Morogs are the masters now."



MEN IN SPACE

The first manned space flight took place on 12 April 1961. On that day a young Russian, the late Yuri Gagarin, orbited the earth for one hour and forty-eight minutes, and ascended to a height of 205 miles. Since that breakthrough, the emptiness of space has seen many more spacecraft, both Russian and American, piloted by men who are prepared to risk their lives in this new form of exploration.

Shortly after Gagarin's historic flight, an American naval officer, Alan Shepard, was blasted into the sky for a trial shot of over 115 miles. He did not make an orbit; the first American to actually do so was Colonel John Glenn, who circled the earth three times at a height of 162 miles.

Now the space race was on.

Orbit followed orbit, as the two nations set up records in space flight—and just as quickly broke them. In 1963, Gordon Cooper completed twenty-two orbits.

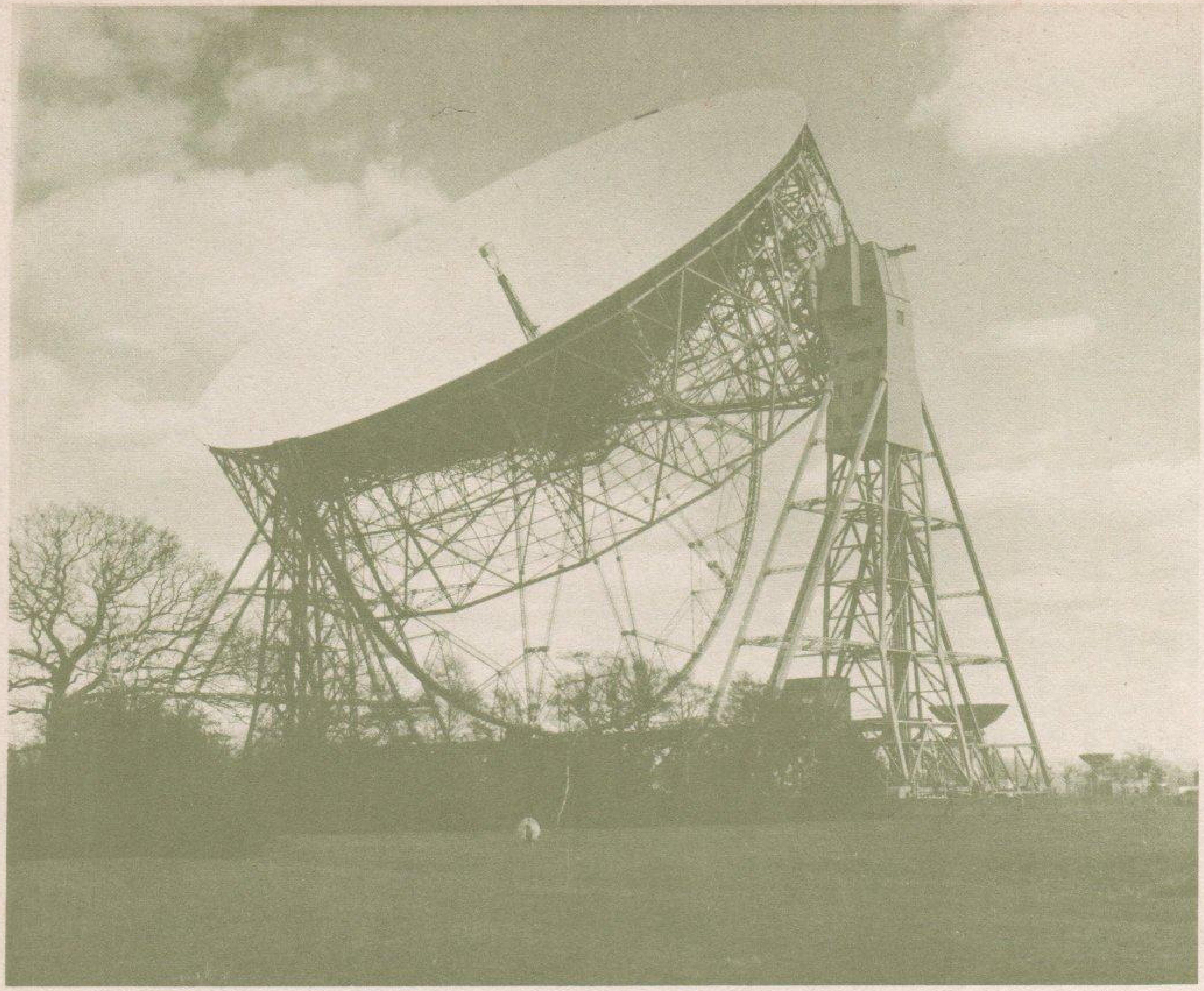
But the Russians bettered this by a flight of eighty-one revolutions by Colonel Walerie Bykowsky. This epic flight also witnessed the first woman in space, Valentina Tereshkowa, who was launched two days after Bykowsky. They achieved another great success when Alexei Leonov became the first man to walk in space.

The Americans were amazed but not dismayed: they soon had their own space-walker in the form of Ed White, who broke Leonov's record by eleven minutes.

Joining two spacecraft in orbit has been the most difficult operation so far. The Americans seem to have mastered the art, but their experiments have not been without trouble and danger. The Gemini-8 mission with David Scott and Neil Armstrong succeeded in docking with another rocket, but the two craft went into a violent spin which could not be controlled. An emergency landing had to be made.

Remarkable though the story of space flight has been, it has also suffered disasters which all the careful planning could not prevent. A Russian was killed when his craft crashed on landing. Three Americans died in a fire in their Apollo spacecraft, more tragic because they were only training. But the training programme still continues.

None of these brave men died in vain. Earlier mistakes in design have now been rectified and if all goes well the first man from earth will set foot on the moon within three years.



Like a giant ear, the Jodrell Bank radio telescope is 'cocked' to listen to the sounds from Space.

LISTEN TO THE STARS

Did you know that the stars send messages to earth? You can listen to these signals at Jodrell Bank in Cheshire.

Not many places remain unexplored on this earth of ours. But we have scarcely begun to explore the vast areas of Space.

Carried aloft by powerful rockets, earth-satellites are answering more and more of our questions about the world beyond.

Radio Astronomy is another important source of information. In the control room of the radio telescope at Jodrell Bank in the Cheshire countryside, a never-ending flow of tiny sounds echoes from the loudspeakers. These are 'signals' received from the stars, and they are being used to build up detailed maps of the heavens.

The astronomer was once the guide to this universe. He depended on his eyes. But eyes, however powerfully aided by optical telescopes and photographic plates, can receive only the very short light-waves emitted by stars.

These light-waves are moreover, interfered with in their passage to earth by interstellar dust and gas, by dust and cloud in the earth's own atmosphere and even by common daylight.

The foundations of radio astronomy were laid almost accidentally in the early 1930s by an American engineer called Jansky. He found that radio signals were emitted from regions in space where no visible objects could account for them.

When the war broke out in 1939, radio and radar techniques became of great importance. The result was that radio astronomy quickly became recognised as a powerful tool for the exploration of space.

KEYHOLE TO SPACE

The bigger the radio telescope the better. The need for great size arises because it is difficult to achieve sharp focus in 'scanning' very long wave lengths. At Jodrell Bank has been built the latest, largest and most penetrating astronomical instrument of its kind in the world.

The telescope is built entirely of steel. The engineers who built it had to tackle several big problems. The entire structure, with over an acre of wind-catching bowl area, must be steady in storms. It must withstand accumulations of snow and ice, and rain must drain safely and without nuisance from the bowl in any position. It must be accurate in the hottest summer and the keenest winter, and the bowl when pointing at the sun must neither absorb so much heat as to distort the steelwork, nor reflect so much heat as to melt the aerial at the focus.

The Jodrell Bank telescope rotates on a double circular rail track. It is 'steered' from the control-room, and the steerable part weighs over 2,000 tons.

The bowl is a paraboloid of 250 feet diameter, made of welded steel plates and carried in a lattice steel cradle.

At the centre of the bowl is a lattice steel tower 55 feet high, and mounted at the top of the tower is the aerial to which are concentrated the radio-waves received and reflected by the bowl.

The bowl and cradle add up to a staggering 800 tons. The whole assembly is rotated in elevation by electric motors. The pinions and racks for this huge structure were taken from the gun-turrets of the dismantled battleship *Royal Sovereign*.

In high winds this giant's saucer has to withstand huge buffetings. The answer to this is a great circular stabilising girder or 'bicycle wheel', whose centre lies at the axis of rotation of the bowl.

THE SEEING EYE

The telescope must move smoothly and exactly, so that it can aim constantly at a given point in space regardless of the earth's rotation and orbit. It usually creeps even less perceptibly than the hour-hand of a watch. Thus it can follow the track of the moon, the planets, or a man-launched earth-satellite.

Suspended beneath the centre of the bowl is a small laboratory. To reach it, the operators must walk along catwalks. It is in this airborne laboratory that the incoming radio signals are amplified.

But the main control room lies in a building about 200 yards away. All motions of the radio telescope can be controlled by a single operator at a desk studded with dials and switches. Through the window facing him he commands a full view of the telescope, which is floodlit at night.

The aiming and movement of the telescope are electronically controlled. A computer decides just what it ought to be scanning, and in which direction it should point.

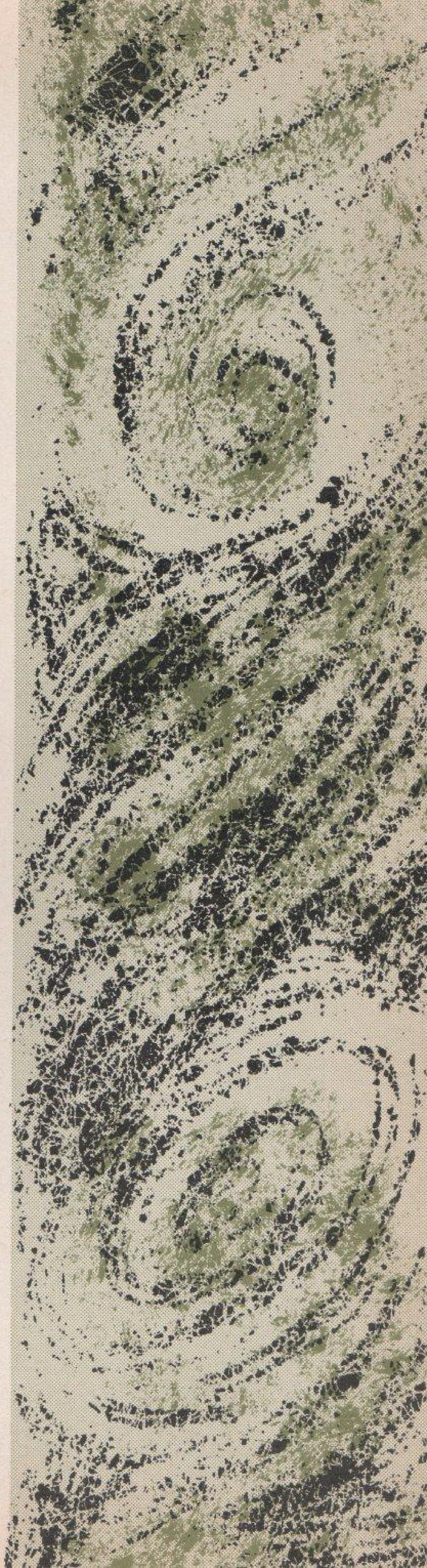
But the radio telescope not only scans but also transmits. It sends out radio signals aimed at the Moon and the planets, and receives them as they bounce back.

The tracking of meteors is another important field of study. Radio echo work has already established that meteors, whether sporadic or in streams, are localised in the solar system. Some of the major streams are certainly associated with comets.

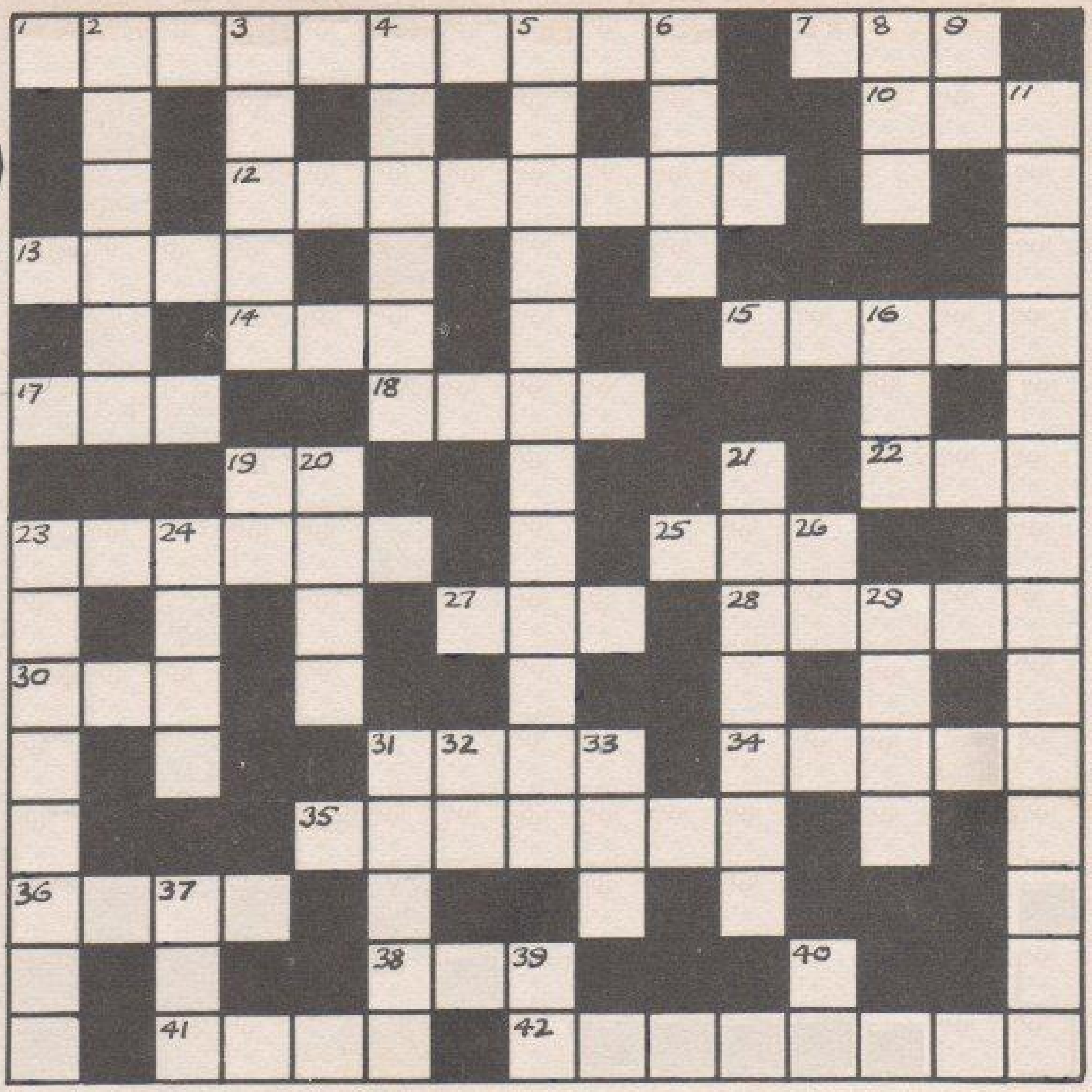
It is not yet known how radio-waves are generated in space. Of the thousands of established radio sources only fifteen or twenty are thought to be in the local galaxy. One of the most intense of all radio sources lies in the constellation Cygnus. This source is extragalactic, and has been identified as two great nebulae in collision about 700 million light years away.

Jodrell Bank is now world famous. Its success in tracking the Russian sputniks and the American space probes won it distinction in the International Geophysical Year.

Britain has entered the Space Age exploration as an active participant—thanks to this amazing radio telescope.



The MYSTERIES of SPACE



CLUES

Across

1. Beyond the ionosphere
7. Star of our solar system
10. Salt water
12. The earth is doing this all the time
13. Folland ——
14. She
15. Sign of the Zodiac for August-September
17. Poisonous snake
18. Time of day when sun is at its highest point in the sky
19. Afternoon
22. Extinct flightless bird
23. Luminous body seen in the atmosphere
25. Young of the bear or wolf
27. Name of outgoing tide
28. Planet farthest from sun
30. Sign of Zodiac depicted by lion
31. Unit of electromotive force
34. Sample
35. Eighth planet from the sun
36. Not quite hot
38. Abbreviation for 'in the preceding month'
41. Fourth planet
42. Sign of the Zodiac depicted by a water carrier

Down

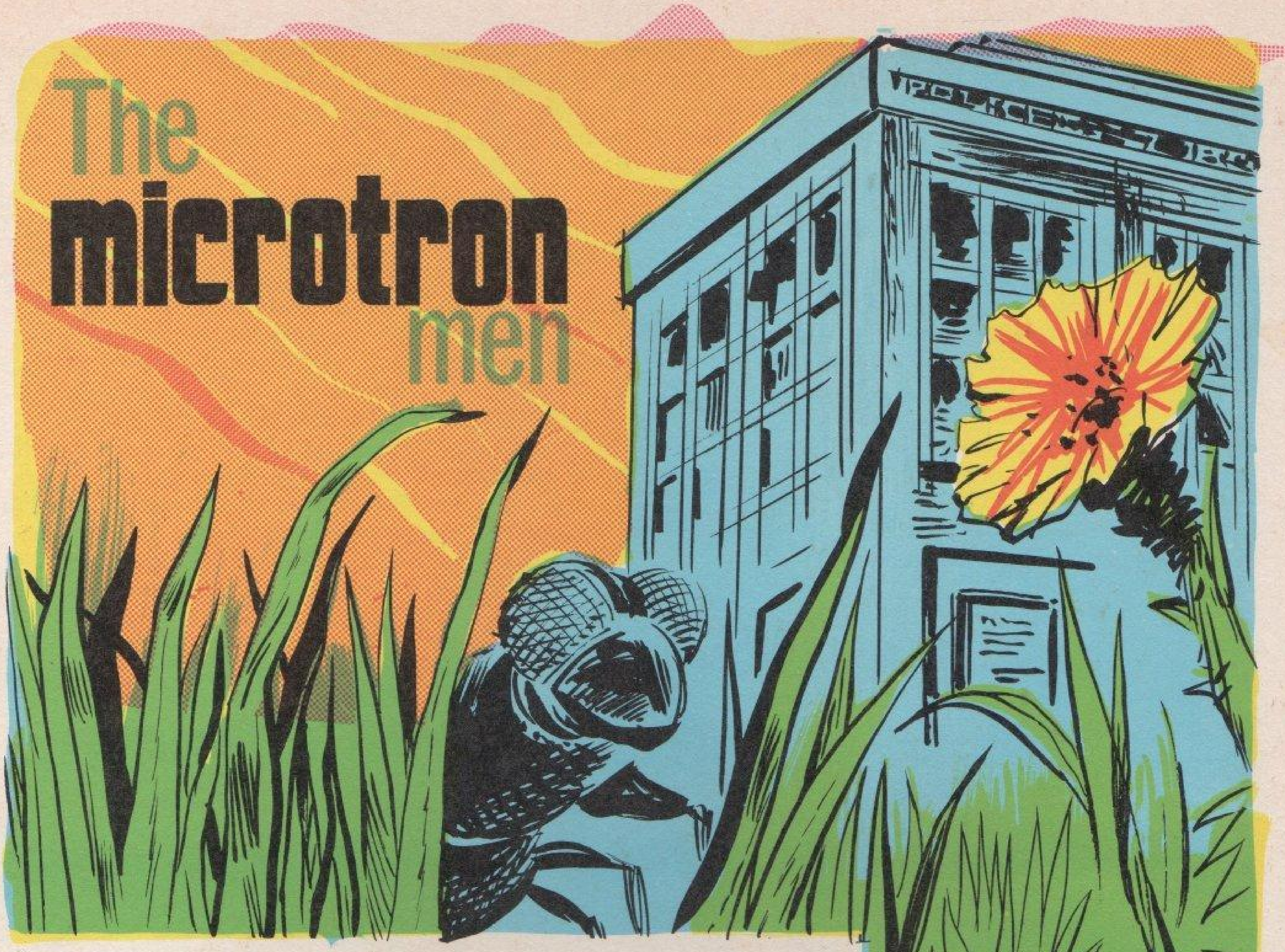
2. Seventh planet
3. Our planet
4. Planet with rings
5. Found between Mars and Jupiter
6. Volcano found in Sicily
8. One of the great powers in the space race
9. New England (abbr.)
11. The 'northern lights'
16. Every crater on the moon has one
19. Physical Education (abbr.)
20. Earth's satellite
21. Largest planet
23. Name of the Galaxy of which our sun is a member
24. Scandinavian thunder god
26. Bachelor of Law (abbr.)
29. —— Major
31. Second planet from the sun
32. Observation post (abbr.)
33. Pull
37. Aries
39. Diminutive form of 'Thank you'
40. Alternative

Answers

Down: 2. Uranus, 3. Earth, 4. Saturn, 5. Asteroid belt, 6. Etna, 8. U.S.A., 9. N.E., 11. Aurora borealis, 16. Rim, 19. P.E., 20. Moon, 21. Jupiter, 23. Milky Way, 24. Thor, 26. B.L., 29. Ursa, 31. Venus, 32. O.P., 33. Tug, 37. Ram, 39. Ta, 40. Or.

Across: 1. Outer space, 7. Sun, 10. Sea, 12. Rotating, 13. Gnat, 14. Her, 15. Virgo, 17. Asp, 18. Noon, 19. p.m., 22. Moa, 23. Meteor, 25. Cub, 27. Ebb, 28. Pluto, 30. Leo, 31. Volt, 34. Taste, 35. Neptune, 36. Warm, 38. Ult, 41. Mars, 42. Aquarius.

The microtron men



DR. WHO stood outside the *Tardis* and called for Victoria and Jamie to join him. "This is a lovely place, children," he crowed. "My computer has at last come up trumps and has landed us on a world where all Nature is mild and benign. Come on out, you two."

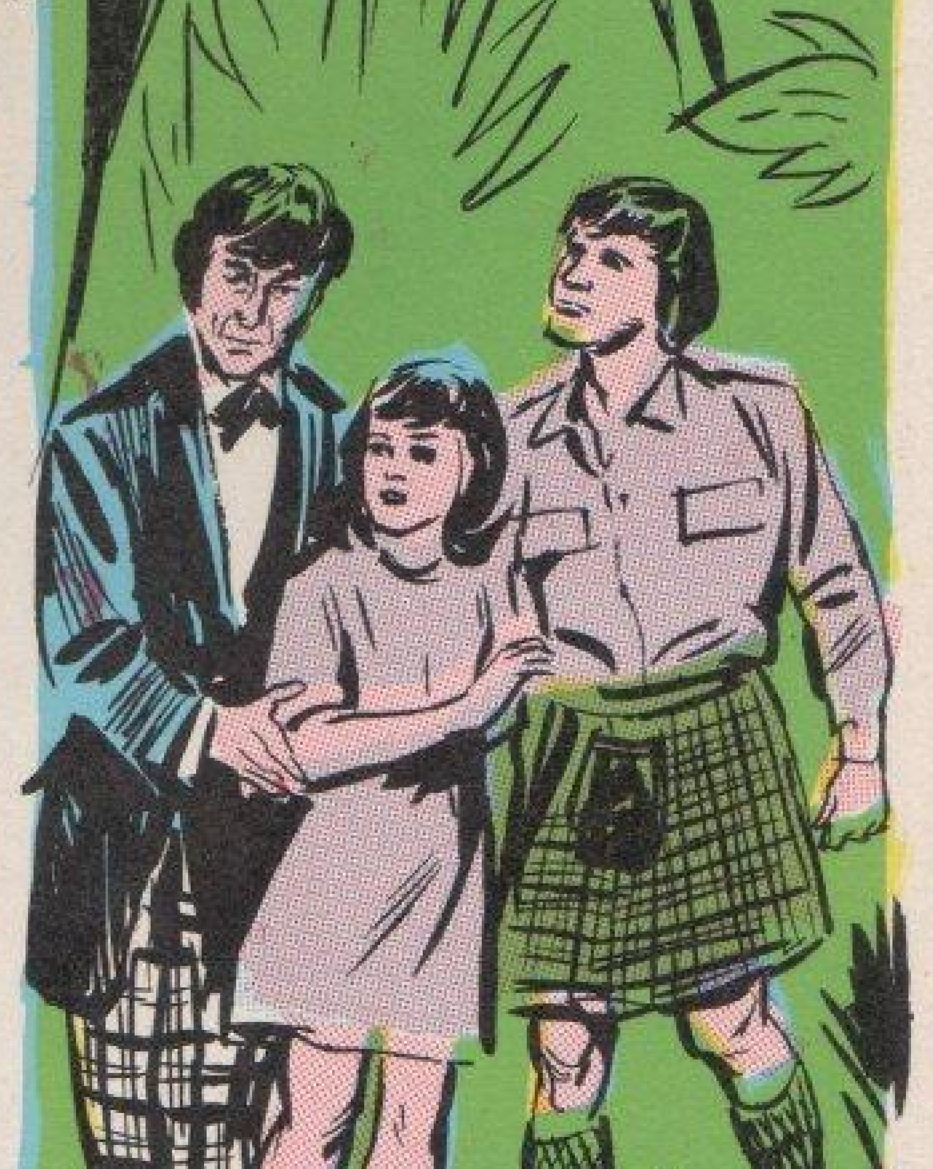
They came out hand-in-hand and joined him. Looking to the right and left and all round they saw that it was indeed a most beautiful world. The grass was green and thick and the trees all looked like gigantic flowers. They looked back at the *Tardis* and then Victoria gripped the Doctor's hand in quick dismay. "It's *growing*, Doctor, the *Tardis* is *growing*. It's over a hundred feet high now and still growing."

"Nonsense, child," snapped Dr. Who. "Trick of the light, my dear. But——" He stroked his chin and stared up as the *Tardis*, still apparently growing, now filled the whole of their vision. The grass around them was growing too. Already it was taller than they were, then it went on growing until soon the tops of the blades were out of sight.

"What's happening, Doctor?" cried Jamie. "It's going dark. The *Tardis* is so big you can't see the edges at either side; it's filling the whole world. It's getting so dark I can hardly see anything."

Dr. Who stood entranced as the whole landscape shot up and up until now everything was out of their sight. "Like 'Alice in Wonderland'," he said gaily. "Everything's growing so big all of a sudden. What a peculiar thing——"

Then Victoria screamed and pointed. In the dimness a gigantic ant was standing looking at them through its enormous compound eyes. It was as big as an elephant and growing bigger every second. Another joined it then they grew too big even to be seen by the travellers. Now it was quite dark and they held to each other's hands.



"Keep up your courage, children," came Dr. Who's voice. "This must be some quite natural thing we are experiencing. I'm beginning to wonder whether it isn't a case of everything growing bigger round us but rather of us growing smaller and smaller and smaller."

Then his voice ceased and they all held their breaths. There came a sound like a gigantic wire twanging and the darkness rolled back and they were in a place of blazing lights.

"Another batch has come through," said a voice, and they found themselves in the middle of a crowd of people all staring at them and all dressed in a very wide variety of old and tattered costumes, some even made of leaves.

"Great Scot, Doctor," came Jamie's agitated voice. "Will you just look at that sky! There's dozens—hundreds—of suns shining up there, not just one like our old Earth."

"Those aren't suns, boy," said a dignified white-bearded old man. "How could we live if the light of hundreds of suns was shining on us?"

"You've got something there," said Dr. Who puckishly. "But, if they are not suns, what are they? They look like suns to me, just like our old Sol."

"This time clowns have got through," said the whitebeard in contempt and he turned away. "I will return to the Glass, Hrad, and keep watch. Do what you can for these three. It is too much to hope that *they* will be able to join in the Project."

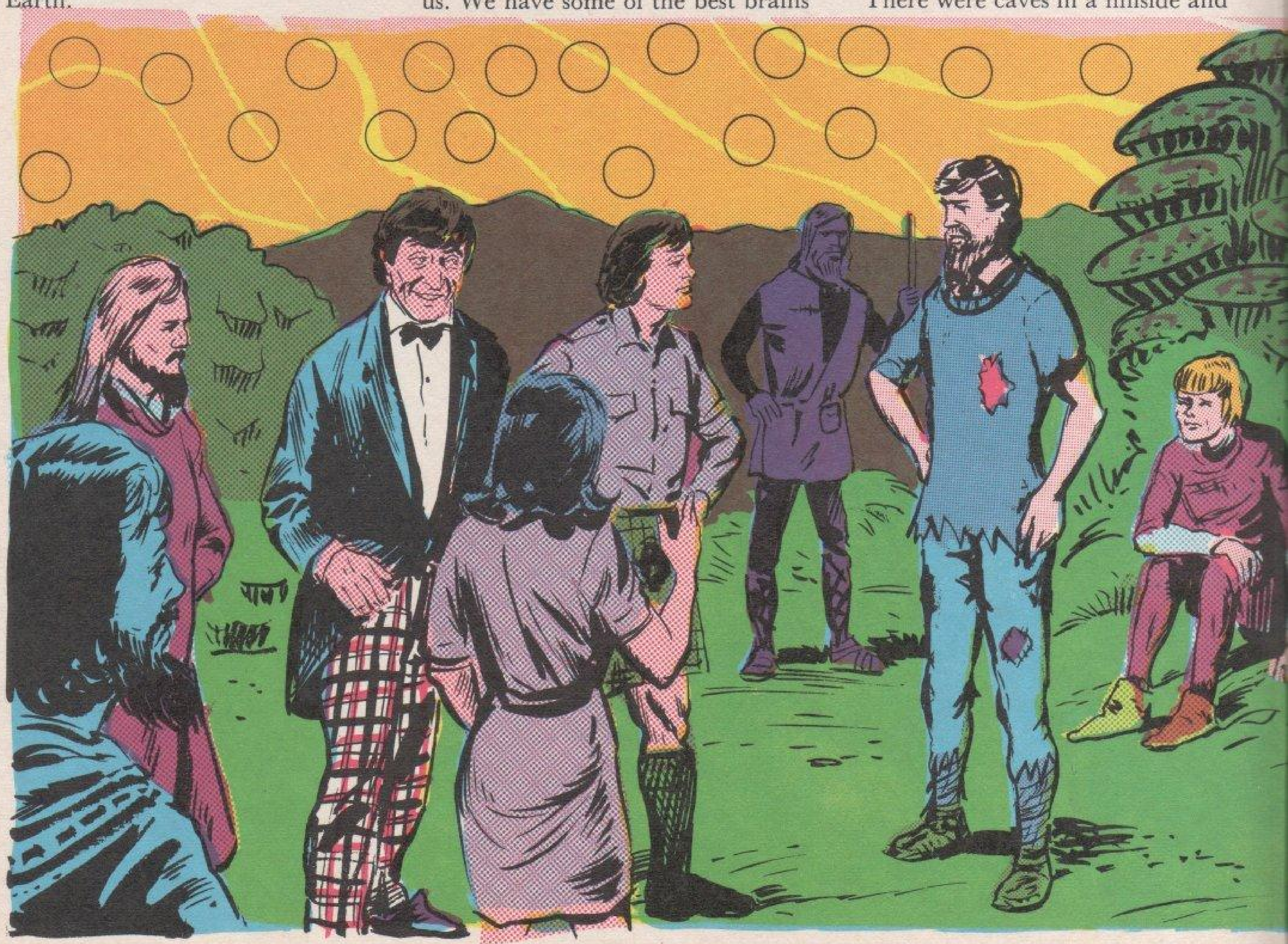
"Help!" said the Doctor, pricking up his ears. "Of course we'll help. What is it you want us to do? Are you in trouble of some kind?"

"Forget it, strangers," said a man with a gloomy face, younger than the other. "It doesn't matter. There's nothing you can do to help us. We have some of the best brains from Earth here and they haven't been able to come up with anything constructive yet."

"First of all," said the Doctor firmly. "Before you go on insulting us suppose you tell us just where we are, just who you people are, and the nature of this baffling problem you say the best brains of Earth cannot solve."

The other smiled pityingly. "You'd never understand," he said more gently. "Come, you must eat and rest awhile. I am named Hrad. We know where you have come from. We all came from the same place. Brun, our present leader, came three months ago. He was then a strong young man. I myself arrived only three weeks ago. At one time there were hundreds of us. They died very quickly, of course. Others came and we grew again. But we have long realised that life is too short here for the solving of long-term problems."

There were caves in a hillside and



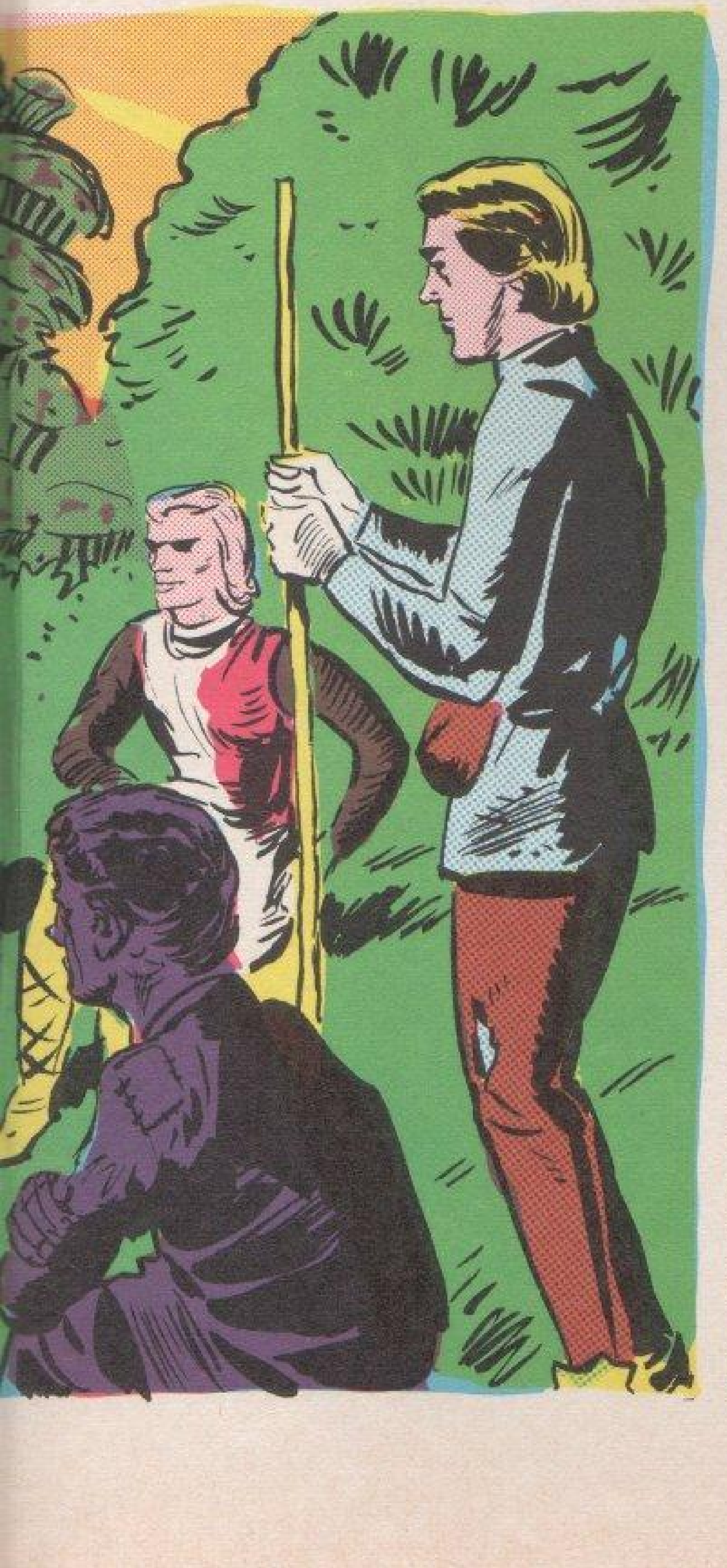
in one of them the three from the *Tardis* were given food and drink. These were vegetables and water, the vegetables raw and unsalted. Victoria made a face as she struggled with a big root like a turnip. But it was food, and for that they had to be thankful. Also, they had been left alone for a while.

Dr. Who had his chin in his hand and was brooding heavily. Jamie and Victoria looked at him and Victoria giggled.

"You wait," she whispered to Jamie. "Any minute now he'll be coming up with some strange and impossible theory as to where we are and how the *Tardis* got here and how we're going to get away."

"Aye," chuckled Jamie. "He gets worse every time."

"Hush, children," snapped the Doctor. "I'm thinking! If I were to tell you what I really think has happened you'd never believe me in a million years."



"Aye, Doctor," laughed Jamie. "Ye can say that again."

"The glass, the glass, what did you mean by that?" demanded the Doctor when Hrad came back after they had eaten. "What is it and where is it?"

"Of course you don't know," said the other. "We, in our time, have called it the Glass because in the legends of this place, many generations ago, a nephew of one of the Ancients of our world, a man called Galileo, called it a Glass. The Glass is—well, it's just everything. It stretches across the whole of the heavens from horizon to horizon in every direction. No man can see the outer edges if indeed there are any. It is far beyond our stars. How far above us is the Glass our wise men are still trying to calculate. Some say hundreds of miles, some thousands and some, though these are thought to be crazy, many millions of miles."

"Take us to this Glass of yours," demanded Dr. Who.

Hrad looked uncomfortable. "Only those amongst us with any claim to knowledge are allowed to use the Glass. Time goes so fast here that not a moment must be wasted. Our present Glass is a five-hundred inch reflector and that is not large enough."

Dr. Who stared at him doubting what he had heard. Five hundred inches! "What in the name of heaven are you talking about, sir?"

"You asked me about the Glass," said Hrad frowning.

"Are there, then," asked the Doctor astutely, "*two* Glasses, one you spell with a small letter and one with the capital letter?"

The other smiled. "A quaint conceit. But, oddly, true. There is the great glass that covers the whole world and far beyond it, way past our limit of vision, and there is our own Glass, tiny by comparison with the original. It is a mere five hundred inches in diameter and now quite useless. It may be many generations before we can grind a glass large enough to give us a glimpse of what lies beyond the glass in the sky. But come, enough of this, you must get to work. Here everyone works, hard and long and all the waking hours. There is food to grow and animals to tend and the glass furnaces to watch and the grinding caves. They are where we are trying to form and grind the new six hundred inch Glass. The grinding of this lens is such a gigantic task that already twelve generations have been exhausted by it and it is still not done."

"When you speak of five and six hundred inch lenses," said Dr. Who firmly, "you are talking absolute nonsense, my dear sir. You must forgive my bluntness but I am a scientist and I know about such things. There is the wavelength of light to be considered. That is constant and you will never get——" He stopped and pursed his lips. A most tremendous theory was forming in his mind. But this was no time to bring it out. These people with their odd talk of generations passing like clock-ticks weren't in any sort of mood to listen to his theories about nuclear physics.

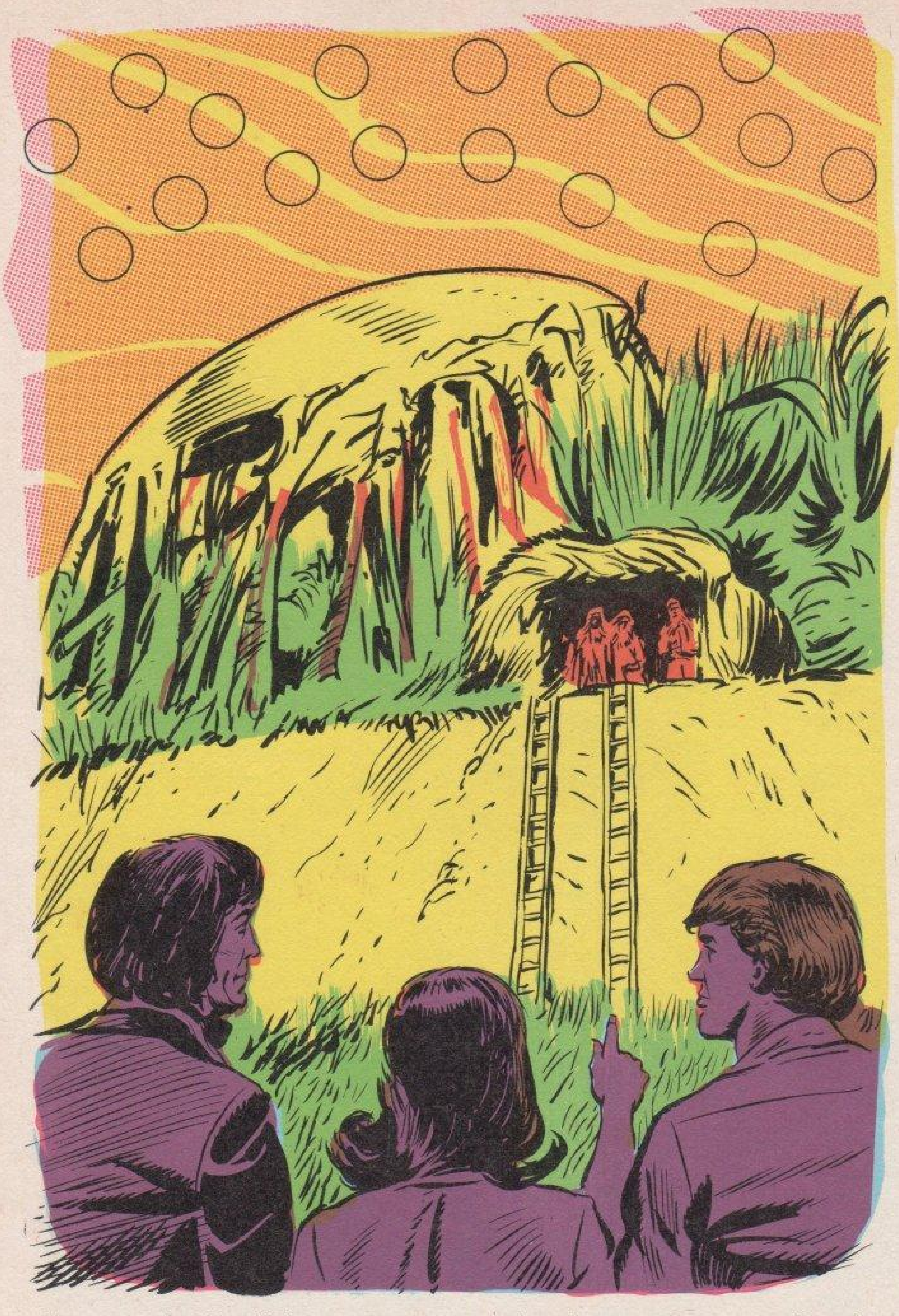
"Well," said Hrad judicially. "If you are truly a wise man and a scientist, there is no need to keep you away from the Glass. Maybe, although it seems too much to hope for, you may be able to help us in this gigantic dilemma in which we find ourselves. No one in all the generations that can be remembered has ever been able to tell us where we are, how we got here, what we are here for, and how we can regain our lost lives."

"Not so very different a situation from that of the world we all seem to have come from," said the Doctor sarcastically. "Tell me, what is the normal life-span in your world?"

"Well, now," was Hrad's reply. "Normally, a life-span is about six months. When I say months, of course, it is by our primitive reckoning. There is no day and night here, no weeks, months, years, as we recall dimly. With all those stars in the sky how can we develop any sort of astronomy?"

"You said they were not stars," protested the Doctor accusingly. "If they aren't stars, what are they? And how many of them are there?"

"They are not *stars*, as the stars were in our skies back home," said



the man glumly. "There are over two hundred of them as far as we have been able to count."

"Quite impossible," stated Dr. Who firmly. "There can be no more than ninety odd. You evidently have no accurate method of identifying these 'stars' in your 'sky'. If you think you see so many as two hundred, this simply is that you are seeing many of them several times." He thought for a moment. "The speeds will be very great. If you see two hundred this means one of the radioactive elements of high atomic weight. Indeed you are right in saying they are not stars. But they are sending down just as much energy or electro-magnetic radiation in relation to the size of this 'world' as the old stars did on Earth."

"All this is quite beyond me, indeed beyond any of our wise men. But it seems that you are a scientist and I must take you to those of us who theorise about such profound matters. The Glass, too, will be of interest to you. It would indeed be the miracle of all time if you, our latest arrival, could find some way of solving the ancient riddle of our unhappy existence."

"Oh, I can solve it," said Dr. Who promptly and loftily. "It'll have to be solved quickly too. Jamie and Victoria have less than a year to live, at your rate, in this place. I have to think of them. I'm all right, of course, I'm beyond all these temporal changes and I'm already so long lived that the normal processes of ageing have passed me by. But although I would dearly love to stay here for the purposes of scientific curiosity, I must return these two children to their own world where things are normal."

"Look, Doctor," protested Jamie. "We haven't got the least idea of what ye're havering about. Victoria is scared. What are you going to do? I don't think it's right to raise the hopes of these people. Just *where* are we, for instance?"

"We are in the same place where the *Tardis* landed," said the Doctor, with a whimsical look in his eyes. "In one sense it's millions of miles from us now and in another sense it's just a few yards away."

"Och awa'," scoffed Jamie. "Ye're off your rocker, Doctor. Why don't ye tell us in plain English?"

"And what, pray, my bonny Scot, would you understand of plain English?" chuckled the Doctor and he turned to Hrad. "Now, my friend of the Microtron Men, where is this Glass you talk about and where are your wise men?"

"I'll take you there," said Hrad. "What was that word you called us—Microtron Men? That's not true: we're all good Britons."

"Just so, just so," said Dr. Who soothingly. "Just a prank of mine."

The Glass, when they came to it, totally amazed Dr. Who. It really was a five hundred inch reflecting telescope and the gigantic size of the mirror upset all his preconceived notions. It was erected in a framework of tough vegetable stalks and at the platform where the object glass was located there was a small grass hut which they approached by ladders.

There were several white-bearded men in the hut and one of them was Brun, the leader they had already met. Hrad explained to him about this remarkable new arrival and Brun nodded his head sombrely and waved his hand.

"Nothing to lose by letting him see the Glass," he said, "if it will amuse him. They need something to settle their minds after the great shock of arriving here. I well remember when I arrived I thought I'd died and come to Heaven. Very shortly I decided I was in the very reverse place."

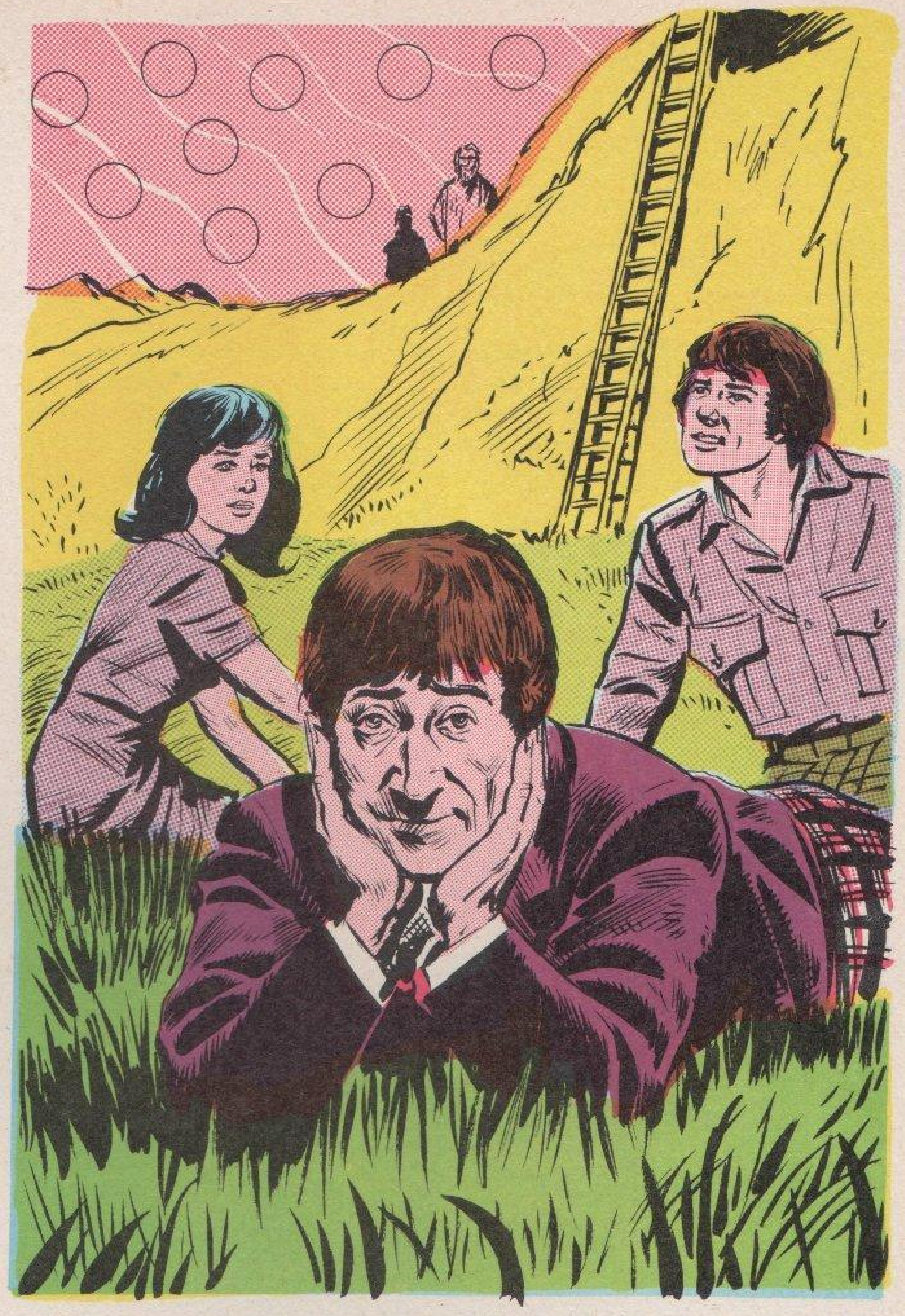
"Hush, hush," warned Dr. Who. "There's movement out there. Has anyone else seen it? Vast unformed shapes moving about. Only fragments of them appear, like clouds surging very slowly all over the lens."

"Old stuff," said one thin-faced old man. "This five hundred incher first showed the effect and we are all quite certain they are natural phenomena, clouds of gas. The many speckles in the sky show no sign of discs, just like the dear old stars seen from the Earth."

"Anyone here know anything about nuclear physics?" snapped Dr. Who and there was a general shaking of the white heads.

"We all seem to come from farming parts," he was told. "We found cows and sheep and pigs here and that was our only comfort. Nuclear physics, well. One or two of our very latest arrivals did seem to have heard of it. Why?"

"The answer to your problem," said the Doctor, "lies in nuclear physics. Don't any of you see what has happened?"



"We were hoping you could tell us, O fabulous wise man," said another of them with a cynical twist of his mouth. "We've exhausted all our resources in building this lens and the next one bigger. We are here and it's all solid and actual. There's the ground and there's the sky. What else?"

"How long have *you* been here?" the Doctor demanded of the thin man.

"Oh, I was born here," was the astonishing reply. "My father before me was born here. His father before him remembered nothing of what was before. This nuclear physics you talk of, is it some potent magic then?"

"Indeed the most potent magic in the whole universe," said Dr. Who. "Jamie and Victoria, children, we've got to do something quickly. We've got to induce this solar system we are in to explode this whole world outwards. How far away are the specks of light in your sky?" he asked of Brun.

"Millions of miles away," was the reply.

"Just a few miles behind the glass," laughed another. "Those are the two opposing theories. You take your pick."

He looked round at the row of blank faces and he knew he was talking in riddles to them. The gigantic task lay with him alone. The theory that had formed in his mind began to grow and take shape and in many ways it made complete nonsense of all that he knew of the theories of space and matter in the universe. He went down the steps and rejoined Jamie and Victoria. He took no notice of the people he had named as the Microtron Men and they all sat down on the grass while the Doctor lay on his stomach with his chin in his hands, thinking of impossible things.

"It's quite impossible and yet

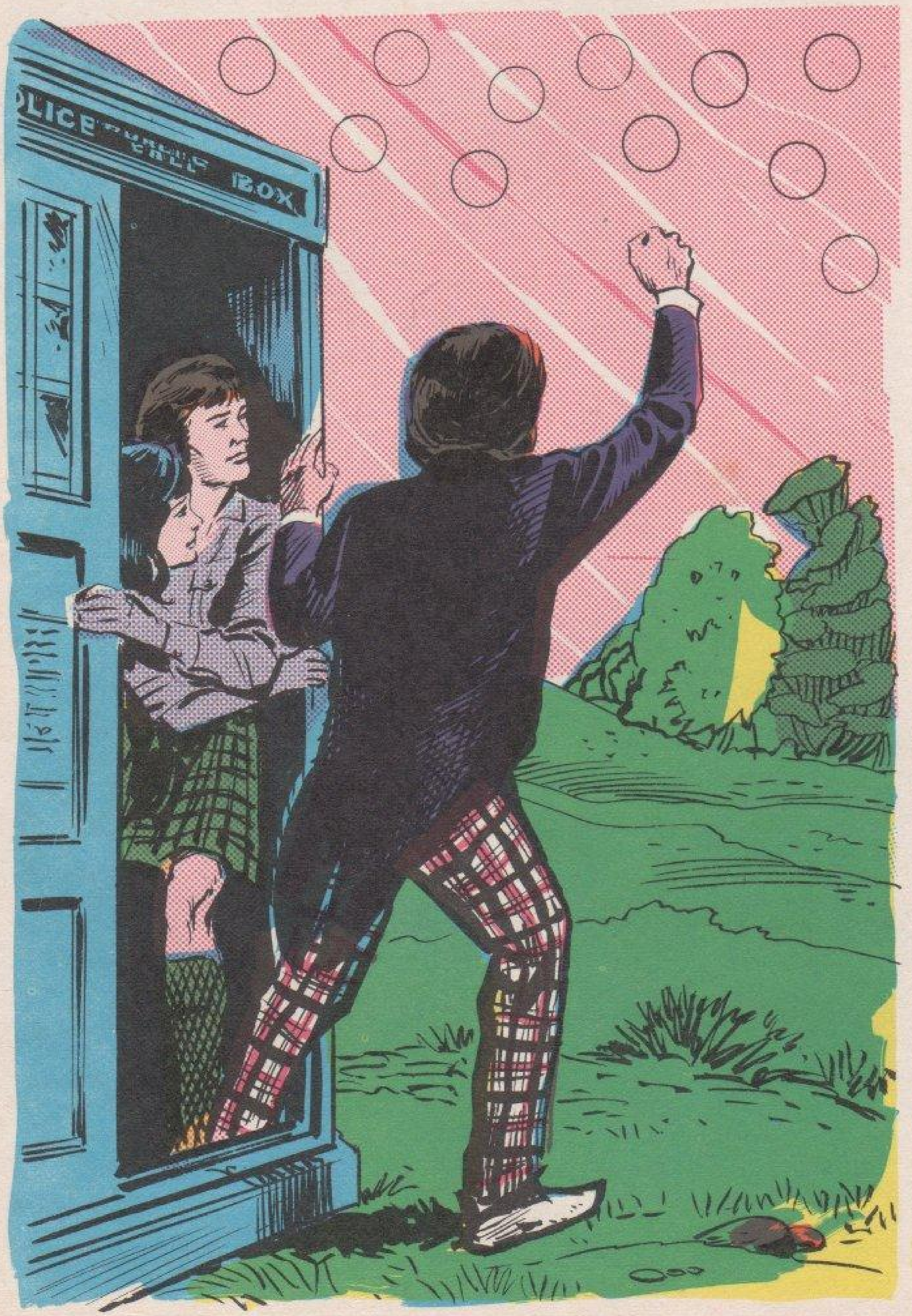
it's happening," he muttered. "How to alter it? Those beings up there, who are they and what are they like? Why are they doing this thing to their fellow-creatures."

"What are ye talking about, Doctor?" asked Jamie. "They're people just like you and me, aren't they? There's men and women and bairns. There's cows and sheep and pigs, dogs and cats?"

"Children," said the Doctor sitting up suddenly and there was despair in his voice. "I've got to tell these people that I am totally powerless to aid them. There is nothing that a man of my size can do to help them, to get them and us out of this hideous situation."

"What's your size got to do with it, Doctor?" asked Victoria.

"I am as small as——" Dr. Who stopped and was baffled by the need of new words. "A grain of dust would be a mountain compared to my size in relation to the world we came from. In the world of the sub-microscopic, time goes far faster and up there a moment might pass while a whole generation lived and died in this sphere." Was there any better way to tell them of the relationship in sizes and time-rates in the world they had come from or—even more startling thought—a world incomparably vaster, and the sub-microscopic world they had been plunged into by the whim of some unthinkably vast scientific experimenter? For, in his own mind, he was convinced that this whole world lay under the glass of a slide on some unthinkable microscope, that the whole world they were on was a pinch of dust, part of the nucleus of an atom with the electrons whirling round it like planets round a sun.



"One chance and one chance remains," he said talking to himself. "The natural radioactivity of this atom, which must be, by the number of its electrons, an unstable radio-active atom. It's never happened yet in all the 'generations' in this world, but some time it is bound to happen. That is the collision of one of those electrons with another, or with an invisible neutron. A nuclear flash of energy released and radiated outwards and maybe we might find ourselves back where we came from."

"Now I do believe you are getting *really* old, Doctor," laughed Jamie. "But, I say, something is happening. The speckles in the sky are going faster, they're getting smaller and it's growing darker."

"Hold on to each other," shouted the Doctor. "The law of inevitable chance has brought this world to its end and if we stand firm we may survive. This world, children, is a world in the nucleus of an atom maybe of radium or uranium. The speckles in the sky are the whirling electrons, relatively as far from us here as the planets were on Earth. It is all exploding——"

Then there was the *Tardis* again and the beautiful landscape. Dr. Who dragged them to the *Tardis* and as they entered he shook his fist up at the sky. "That great glass the Microtron Men spoke of would be nothing but the lens of a microscope in some unimaginably larger and vast world, far beyond our ken, where creatures are experimenting by reducing us to a size far, far smaller than atoms. Let's get away from this haunted place as fast as we can."

LOOKING BACK

A glimpse of our ancestors, as they started and as they developed

The trio of time and space travellers have met many strange and fearsome races of people in their journeys to different ages and galaxies in the *Tardis*. They have seen primitive beings on lost planets, and humans of the future, evolved far beyond the boundaries of the present.

Let's take a trip back through the ages to see our ancestors, the people who inhabited this earth hundreds of thousands of years ago.

Man has only been living on earth for about 500,000 years, a short time compared to the life-span of the earth itself, about 3,000 million years.

The earliest human beings resembled large apes, but had more intelligence than any monkey. These early men were only about 5 feet in height and probably walked with stooped backs. They were essentially human in form, with sloping foreheads, large teeth and chinless jaws, but their brains were less than half the size of those of modern man.

The period from 500,000 B.C. to about 6,000 B.C. is generally known as the Stone Age, and is divided into three sections—Paleolithic or Lower, Mesolithic or Middle, and Neolithic or Upper.

In Paleolithic times, people instinctively lived in groups, giving them protection from the wild animals that abounded at that time. Their tools were primitive: pebbles split off at one end, or broad flat pieces of stone used for scraping animal skins or digging.

Their food would be berries, roots and the raw meat of the animals they hunted with simple wooden spears. Fire was discovered in this period, probably when lightning struck a tree, but early men did not know how to use it to its full advantage.

Most people lived a nomadic life, wandering around until they found plenty of food and game and moving when the supply was exhausted.

They lived in caves in the hillsides, but sometimes they would dig pits to live in, roofed over with branches.

Though primitive, the people were still proud of their appearance, grotesque as it was. They made animal skins into long robes to protect themselves from the bitter weather, and strung shells and teeth together to make necklaces.

Later in the Stone Age, in the Mesolithic and Neolithic periods, men gradually lost their apish features and looked very similar to modern man. The name given to men of these periods is Cro-Magnon. Their brains were much larger than their predecessors in Paleolithic times, and they progressed much further culturally. They taught themselves to paint and decorated their caves with skilful illustrations of their hunting adventures.

Men now began to cook their meat properly, understanding the benefits of fire, and stone and bark containers were made to boil water.

The primitive stone tools gradually gave way to more refined, better shaped flint tools. Arrow and spear heads were fashioned, and hunting became easier.

The Neolithic period of the Stone Age, from about 6,000 B.C., heralded the beginning of a new civilisation and the end of prehistoric ideas.

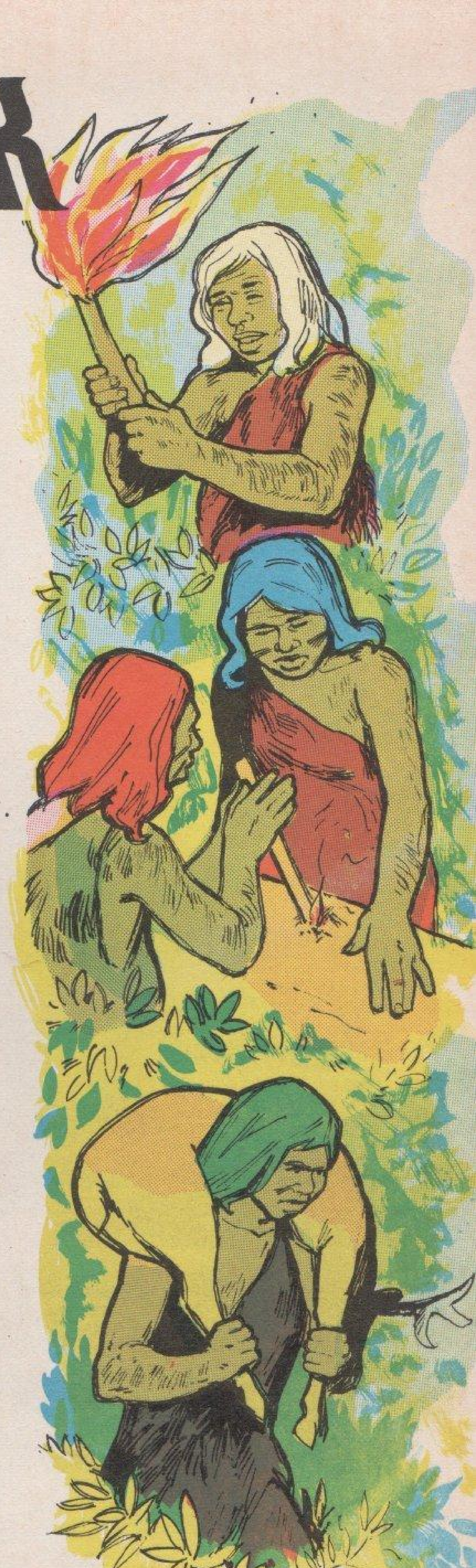
Gradually men learnt to grow crops: wheat, corn, rice and beans. Smaller animals appeared on the earth, the larger, more ferocious types having become extinct, and Neolithic men captured herds and bred them.

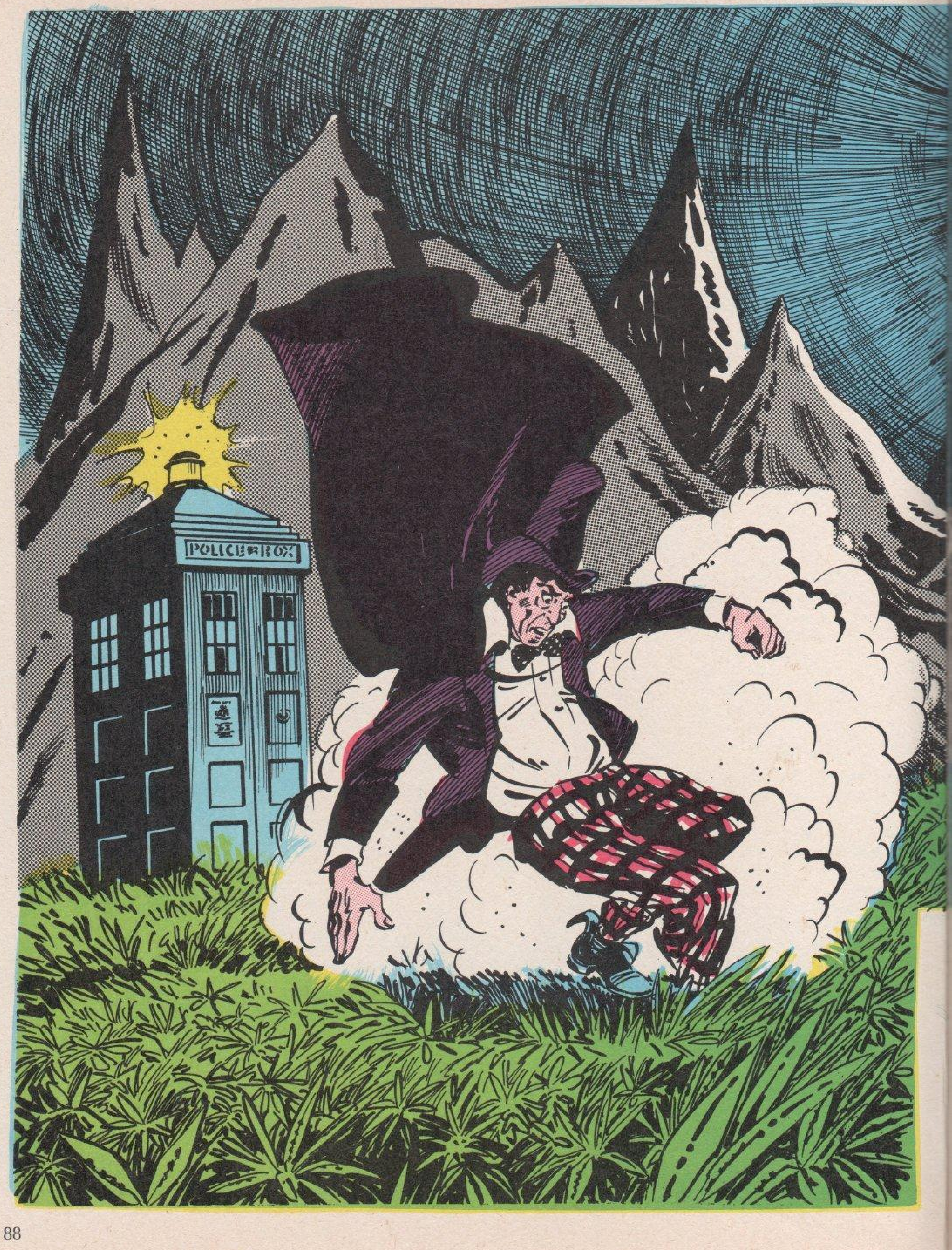
In these ways, men were assured of a constant supply of food, and most people ceased their nomadic existences and set up permanent villages and settlements.

Fences were erected to keep in the animals, and stockades built to keep out marauding wild animals. Wild dogs wandered into the villages and gradually became domesticated. Man discovered how to make pottery and also the arts of basket-making and weaving.

This was the end of the prehistoric era of the Stone Age. After this time events were recorded—the beginnings of history—and metals were discovered, taking the place of stone.

It had taken man nearly half a million years to evolve from a wild, ape-like creature with little intelligence to his present form.

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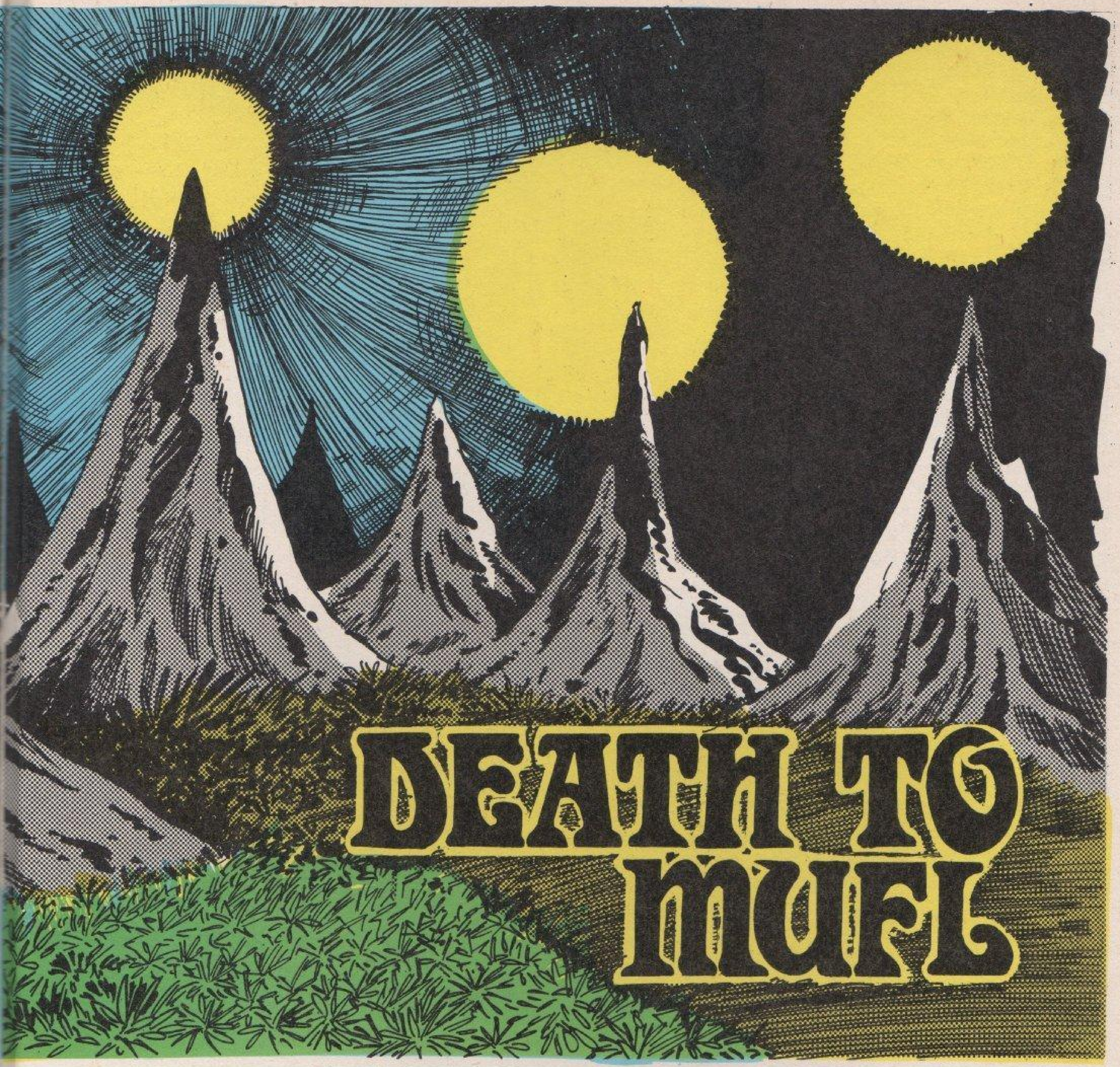


DEATH TO MUFL

"IT'S a pity to waken them," thought Dr. Who.

He tiptoed across the gleaming floor of the *Tardis*, so as not to disturb his two young friends, Jamie and Victoria. They were sleeping soundly after a rather disturbing adventure on a strange planet in the dark dimensions of Galaxy "G".

They were sleeping so soundly that not even the lurch which the spaceship had given as it slid through the trans-dimensional flux could waken them.

"I will have a look at this new planet myself," he thought. He was staring at his vision screen that showed a landscape of strange vegetation and a background of tall grey mountains.

He rammed on his tall, battered hat, pulled his cloak about him and turned a little black switch. Lights glowed; there was a buzzing sound, and the two great doors of *Tardis* swung open.

He closed them behind him. Then he set off across the plain.

Despite his countless journeys through Time and Space, Dr. Who found everything of absorbing interest. First, he was struck by the spiny blades of the plants that covered the ground. Then his attention was caught by the three moons that hung like lamps in the velvet blackness of the sky.

"Amazing!" murmured Dr. Who.

Then with a yell he plunged down into a yawning hole that he had failed to notice.

Down . . . down. . . . Yet he

realised with a shock that he was not accelerating as he fell. In fact, his fall was gradually slowing down. Within a minute he was floating gently past the rocky walls of the shaft into which he had dropped.

He found time to muse aloud upon his odd predicament. "It's almost exactly like the story that Victoria was telling me the other day. . . . Some favourite book of hers on Earth. . . . Now what was the name? Ah, yes—*Alice in Wonderland*! And a little girl had just such a fall as this. . . ."

But unlike Alice he did not land on a bed of dry leaves. The strange force that had controlled his fall now gently lowered him to a standing position.

Immediately he was the centre of a circle of menacing ray-guns held by ten soldiers, commanded by a tall officer. The officer was almost human in appearance, except for his amber eyes and forehead antennae. But his platoon was scarcely human. They wore helmets, emblazoned with a golden sun and superimposed black cogwheel, and red kilts and black ankle-boots, but for the rest their bodies were covered with a stiff mat of black hair and their faces were slightly like terriers.

"I am a space traveller who comes in peace," said Dr. Who loudly.

The officer made a few chirping noises. He waved a thin white hand, and two of the soldiers dragged forward a piece of equipment mounted on a small trolley.

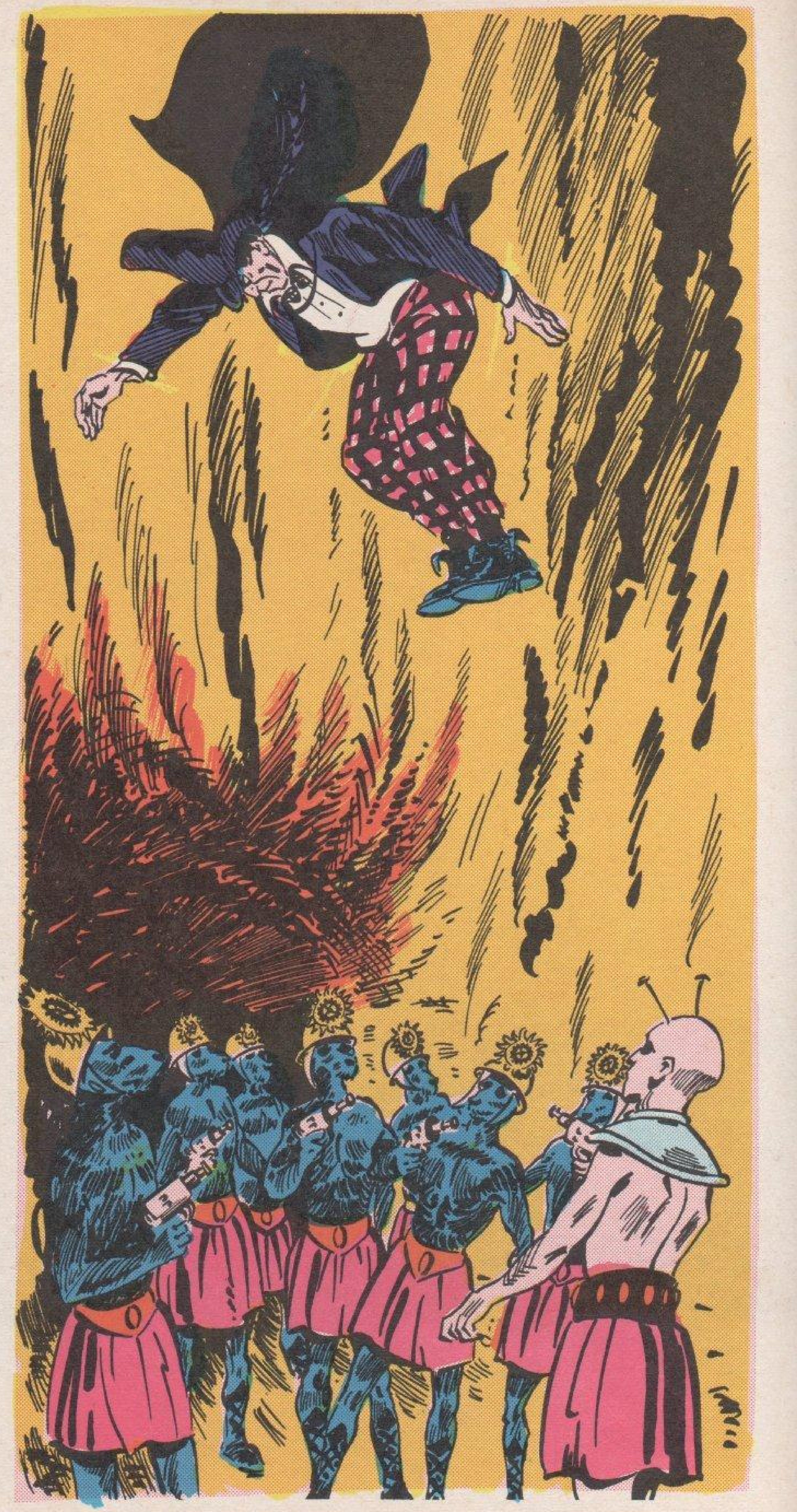
A moment later Dr. Who realised that it was a translator device, for now the officer's chirping reached him plainly in clipped English: "You are another sent by Kanulf to try and kill Mufl—admit it!"

"I'm afraid you are quite mistaken," Dr. Who assured him. "I am what I say—a traveller! I carry no weapons. You may search me if you wish!"

The officer gave an order and two of the soldiers began the search. One of them stepped back sharply with a grunt, holding the musical pipe in his hairy paw.

"Ah!" said the officer.

Dr. Who shrugged. "I assure you it is not a weapon, as you seem to



think. It is a pipe. You know? Music!"

"Music?" echoed the other blankly. "What is that?"

Dr. Who could not restrain a smile. He held out his hand: "Well, the only way I can answer that is to play some. . . . Give me the pipe, please."

The officer's reply was to snatch the pipe from the soldier and push it into his belt. "No!"

He motioned a command: "Take him to the answer room!"

Hustled along by the dog-faced soldiers, the doctor found himself trotting down the sloping floor of a smooth-walled tunnel. Concealed lighting cast a gentle glow around him, but he did not miss the unwinking gaze of television monitor cameras in the roof.

The soldiers who went ahead now stood on a landing platform, ready to push their captive into the rear seat of a snub-nosed transporter. When they were all seated in it, a kind of plastic hood closed soundlessly over their heads. Then, propelled by an unknown power source, the transporter leaped forward into the black mouth of another downward-leading tunnel.

The flight gave Dr. Who a sense of instant weightlessness. He scarcely had time to ponder how his two young companions in *Tardis* would react to his disappearance, when the trip came to an end.

As the transporter glided in to a landing platform, he found himself looking down at a complex of tunnels and underground highways busy with the purposeful passing of beings like the tall officer. Now and then there passed, in well-drilled ranks, units of the dog-faced soldiers.

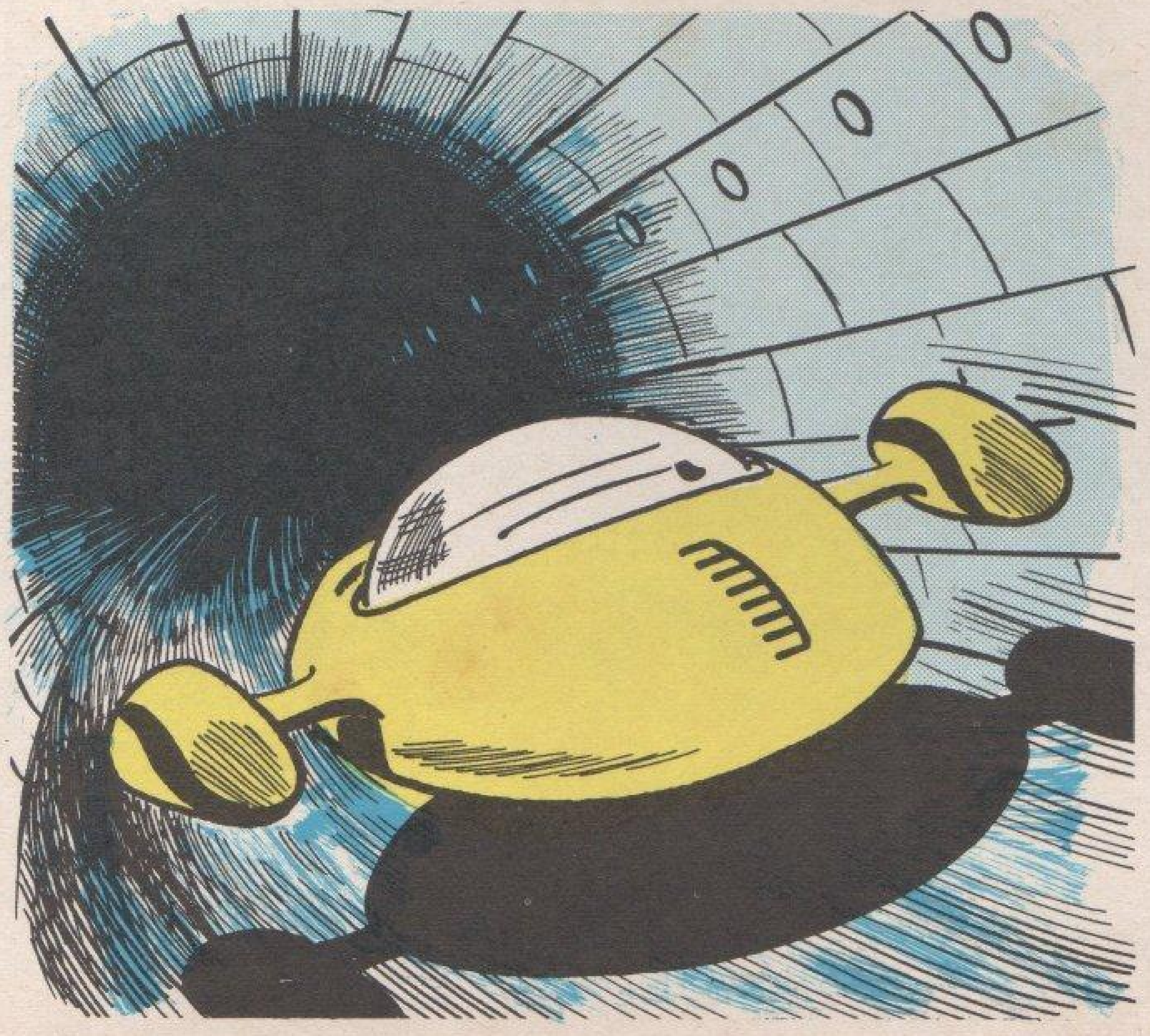
Led by the officer, Dr. Who was taken down from the platform. A few moments later he was walking into the answer room.

The place was very sterile, very clean, very bright and shining with its polished metal, gleaming crystal and ceramics. Dr. Who was handed over to two silver-uniformed attendants. They led him to a cubicle.

"Now, I really must protest. . . . This is against all the rules of interstellar hospitality——" began the doctor.

But nobody was listening. He was fastened inside a cubicle, while a plastic hood closed around him with a faint purr. . . .

To any ordinary person this would have been terrifying enough. But Dr. Who experienced it with a good deal more scientific interest than fear. He guessed that these strange beings were about to examine his brain for the secret mission of which they suspected him—to kill Mufl, whoever *he* might be!



A tingling sensation warned him that the process had begun. He steeled his mighty mental powers for the test. . . .

Through the transparent hood he saw a screen light up on the wall. A flickering pattern of silver light began to shoot across it. He knew it was his own brain pattern reproduced electronically. He also knew that the silver-uniformed attendants who now sat at a control-desk could translate the flickering pattern back into the thoughts that flowed from the innermost recesses of his mind.

"Peace!" thought Dr. Who, trying to shout it aloud in his mind. "I COME IN PEACE . . . I AM A TRAVELLER IN TIME AND SPACE. . . ."

Suddenly he saw the officer who had captured him step forward. He appeared to dismiss the attendants, who turned and left the room. The soldiers also marched out. Now the answer room was empty save for the officer and Dr. Who in his cubicle. . . .

The officer bent and touched a switch. Immediately the tingling sensation became more intense. Dr. Who felt his senses recede. He seemed to be floating remotely between heaven and earth.

At the same time the officer's voice reached him, whispering insistently: "I am Captain J'nk . . . you will listen to me . . . you will remember what I say . . . you will obey. . . ."

It was several minutes before the whispering ceased. The tingling faded away. Dr. Who came to his senses to find himself stepping out of the cubicle.

Captain J'nk bowed and saluted. "Our tests prove you speak the truth, Dr. Who. . . . Forgive this reception—but we must be careful of assassins sent by Kanulf to try and kill Mufl. . . ."

The doctor bowed in return. "I gather that Mufl is your ruler?"

"Exactly!" said J'nk. "And Kanulf

rules the rebel race of Hiinds destined to live on the arid surface of our planet Vegan."

"I should like to meet Mufl," remarked Dr. Who.

J'nk turned away. "Our ruler has already expressed a wish to meet you," he said. "Come!"

On the point of following the captain, Dr. Who spotted his music-pipe lying on the control-desk. He picked it up and slipped it into his pocket.

The soldiers now formed a guard of honour for him as he walked beside Captain J'nk. He found plenty to rouse his interest as they proceeded to the palace of Mufl. The buildings of the underground complex were strange but very beautiful, carved from solid crystalline rock.

The palace was made from the same dazzling rock. It was heavily guarded by more of the dog-faced soldiers. J'nk and the doctor were subjected to a close scrutiny by a robot-guard before being ushered into the palace.

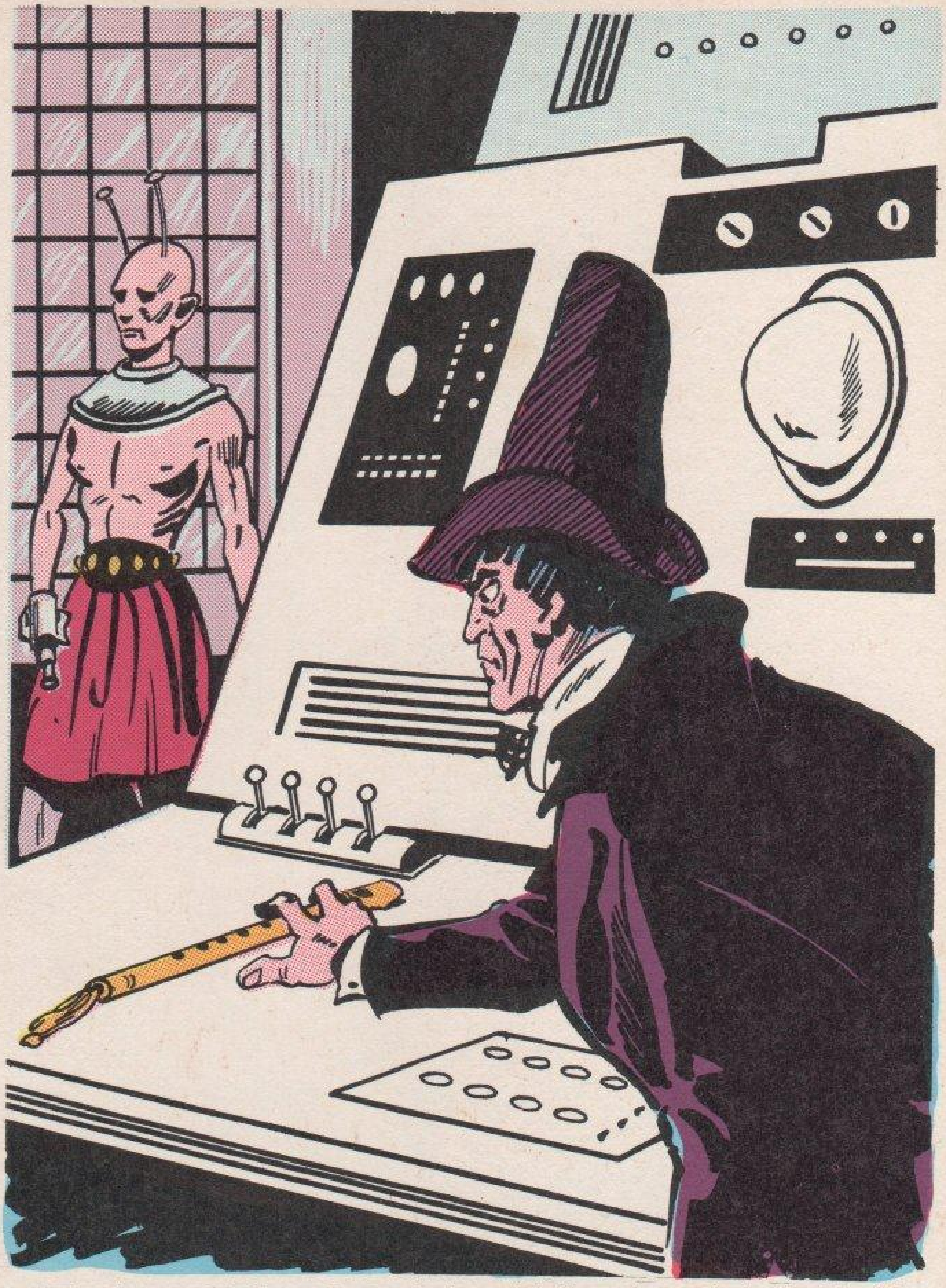
There J'nk saluted. "You are to see Mufl alone," he said. "Nobody else sees our ruler. . . . It is too risky, since so many attempts have been made on his life."

He marched away. Another robot-guard was waiting to escort Dr. Who to a door. The door popped open in response to the robot's distinctive wave pattern, and the visitor was propelled by a steel-fingered hand into the room. . . .

It was a big oval room, lighted from overhead by a great star-map in the ceiling. There was a desk with view screens and reading screens and communication screens around it. Behind the desk sat the ruler of the planet Vegan.

He was a small compact person with the same forehead antennae as the captain. But his amber eyes were not as intense or searching; they seemed to Dr. Who to be the eyes of a deeply thoughtful and kindly creature.

"Dr. Who? I am Mufl. . . . You are welcome to our planet." The voice was the same chirping twitter as the officer, but through the hidden translator machine it reached Dr. Who as a gentle voice.



"Thank you, Mufl . . . I am glad to have the opportunity to meet you," he replied. "Your underground kingdom intrigues me."

The ruler smiled. "Thank you. . . . But of course this is only the centre of the Empire. . . . Come, sit here and I will show you."

Dr. Who accepted the invitation, and took a leather-padded seat close to Mufl's. At a touch of a button the two seats tipped backwards, and the lights dimmed.

Looking up at the glowing swirl of lights in the ceiling, Dr. Who figured there must be billions. He knew that each light must represent a star or a planet. It made him gasp. "This—this is your Empire?"

Mufl spoke quietly beside him. "Not all. . . . Watch!"

His hand moved to a control button on his chair arm, and a red patch, roughly the shape of a pork chop, appeared on the western side.

"That is the Empire," said Mufl. "Every one of eight hundred and forty-three inhabited worlds . . . a billion and a half intelligent beings . . . fourteen races . . . and all faithful to me except Kanulf and the Hiinds. Their attempts to assassinate me have driven me into this seclusion."

The lights came on again and the chair tilted upright. Dr. Who frowned thoughtfully. "What kinds of attempts?" he asked.

Mufl leaned forward. "Once my

robots discovered loose strontium-90 in the upholstery of the Audience Throne. Another time a ray-gun was hidden in the view screen in my bed-chamber. And again a fission bomb was flung at a space-car in which I was thought to be travelling. . . . In each case Captain J'nk has discovered it to be the work of assassins sent down by Kanulf. . . ."

The ruler paused. He stared at his visitor who was suddenly leaning forward with his head buried in his hands. "What is the matter? Are you feeling unwell?" he asked.

"I—I am trying to remember something." The doctor's voice was vague and hesitating. "It was something that happened in the answer room."

He looked up. The strain of concentration showed in his lined face. "Do you mind if I play my music-pipe, Mufl? It helps me to concentrate."

The ruler signified his permission. "I shall be quiet," he promised. "You must try and remember what happened."

Softly Dr. Who blew into the pipe. The wistful notes echoed through the study. But suddenly he snatched his instrument from his lips and leaped to his feet.

"I've got it! . . . Now I remember what happened! . . . Your Captain J'nk sent the attendants and the soldiers out of the answer room. . . . Then he must have put me under deep hypnosis and instructed me to —to kill you when we were alone in here!"

Dr. Who paused. His amazing news had aroused no flicker of movement in Mufl. The ruler was leaning forward on his desk. He appeared to be asleep. The doctor touched him on the shoulder, and then exclaimed in surprise: "Great galaxies! He's in a sort of trance. . . . But how—what——?"

He broke off, staring at his music-pipe. "Mm . . . yes! That must be it! From what J'nk said, music is unknown to these people. And it proves to have a hypnotic effect on them!"

He stepped away, frowning. "But I must try and remember J'nk's hypnotic suggestion. . . . How did he instruct me to kill Mufl?"

His keen brain soon sought out the hidden answer. "He gave me a weapon! In my pocket!"

He dipped into his pocket. His fingers closed on the smooth handle of a ray-gun, and he drew it out.

At that moment the door opened and Captain J'nk entered. He stood gloating over the sprawling figure of Mufl. Then he turned to Dr. Who.

"You have done well! You have rid the Empire of Mufl—a goal which I have sought for many years. . . . Come, give me the weapon."

He took the ray-gun from Dr. Who's hand and turned away, apparently convinced that the other was still under his hypnotic influence.

Like a flash the doctor raised his music-pipe to his lips. As the notes trilled out across the room, J'nk whirled with a snarl. The ray-gun pointed directly at the visitor's chest. . . .

But the trigger was never pulled. J'nk suddenly slumped: a glazed look came into his amber eyes; he crumpled sideways over the control-panel in a hypnotic trance. . . .

"You have done us a great service, my friend!" It was Mufl's voice.

Dr. Who turned to find the ruler rising from his chair and passing a thin hand weakly over his eyes.

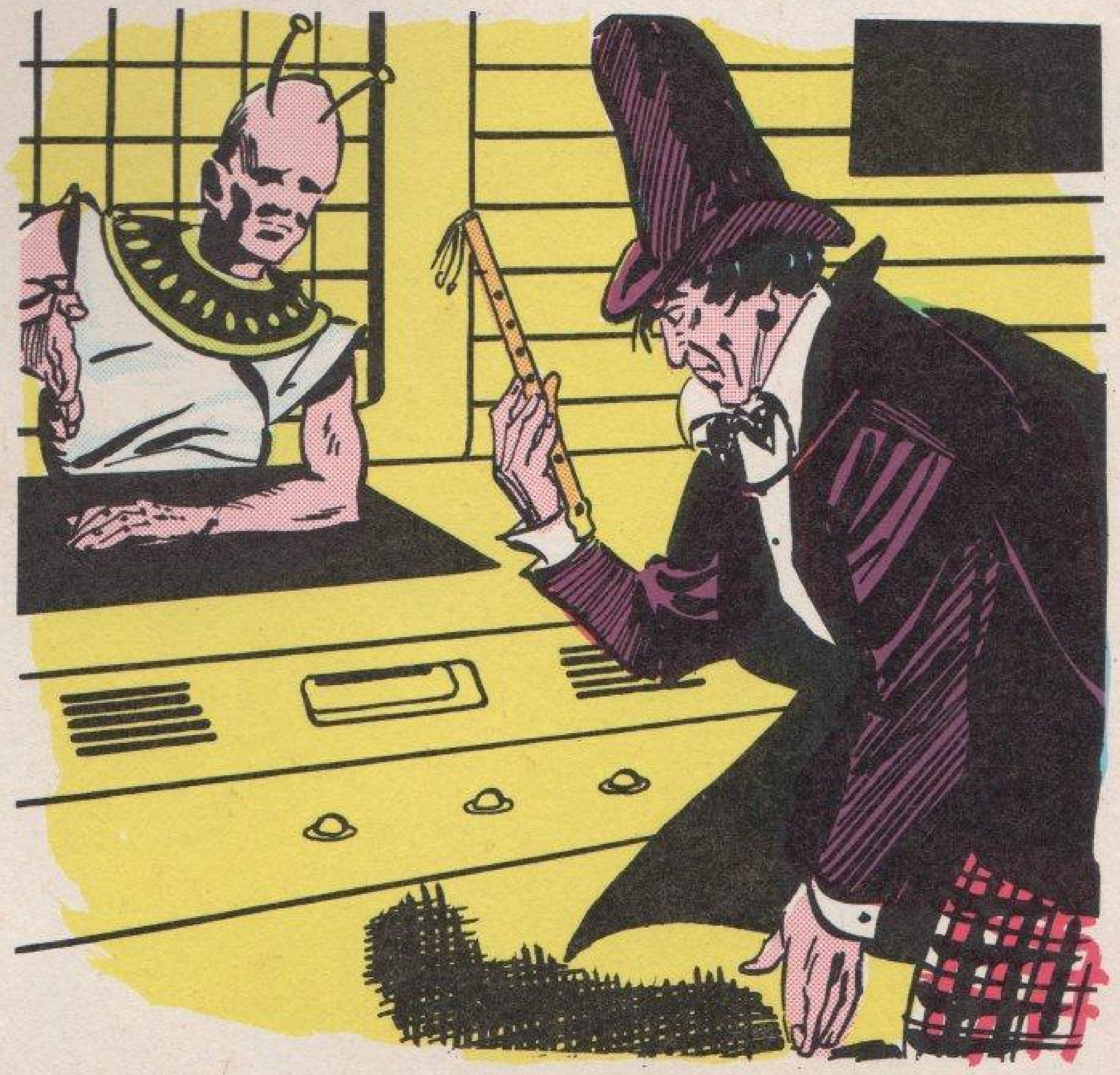
Dr. Who hurried to help him. "I thought you were in a trance induced by the music," he said.

"And so I was," admitted Mufl. "But it soon passed. Then I heard what happened when J'nk came in. . . . So *he* is the traitor who has engineered all these attempts on my life! I have falsely accused Kanulf and the Hiinds."

When the robot-guards had carried away the stupefied body of the false captain, Mufl put a thin hand upon Dr. Who's shoulder.

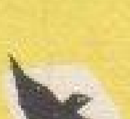
"The whole Empire has cause to be grateful," he said. "I shall call for a great celebration, and you will be the guest of honour."

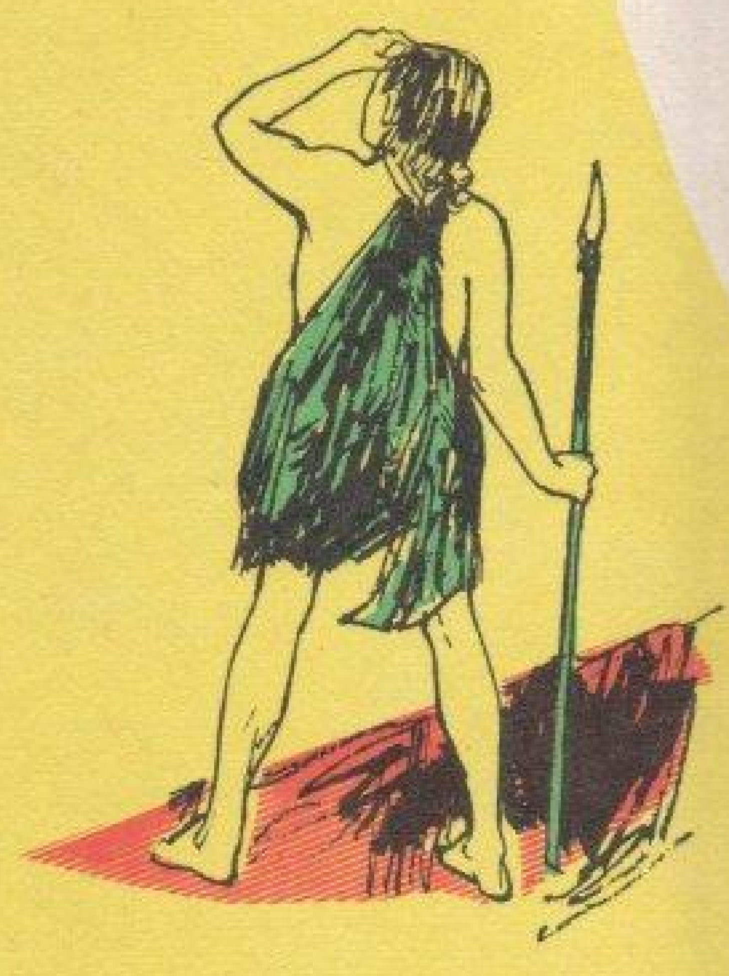
"Well—er—that is very kind, Mufl," replied Dr. Who. "But my immediate aim is to return to the surface of your planet where my space machine has landed. . . . Unless I am mistaken, the two young friends I left there must be very worried right now. . . . I wonder if they will ever believe the strange story I have to tell them?"

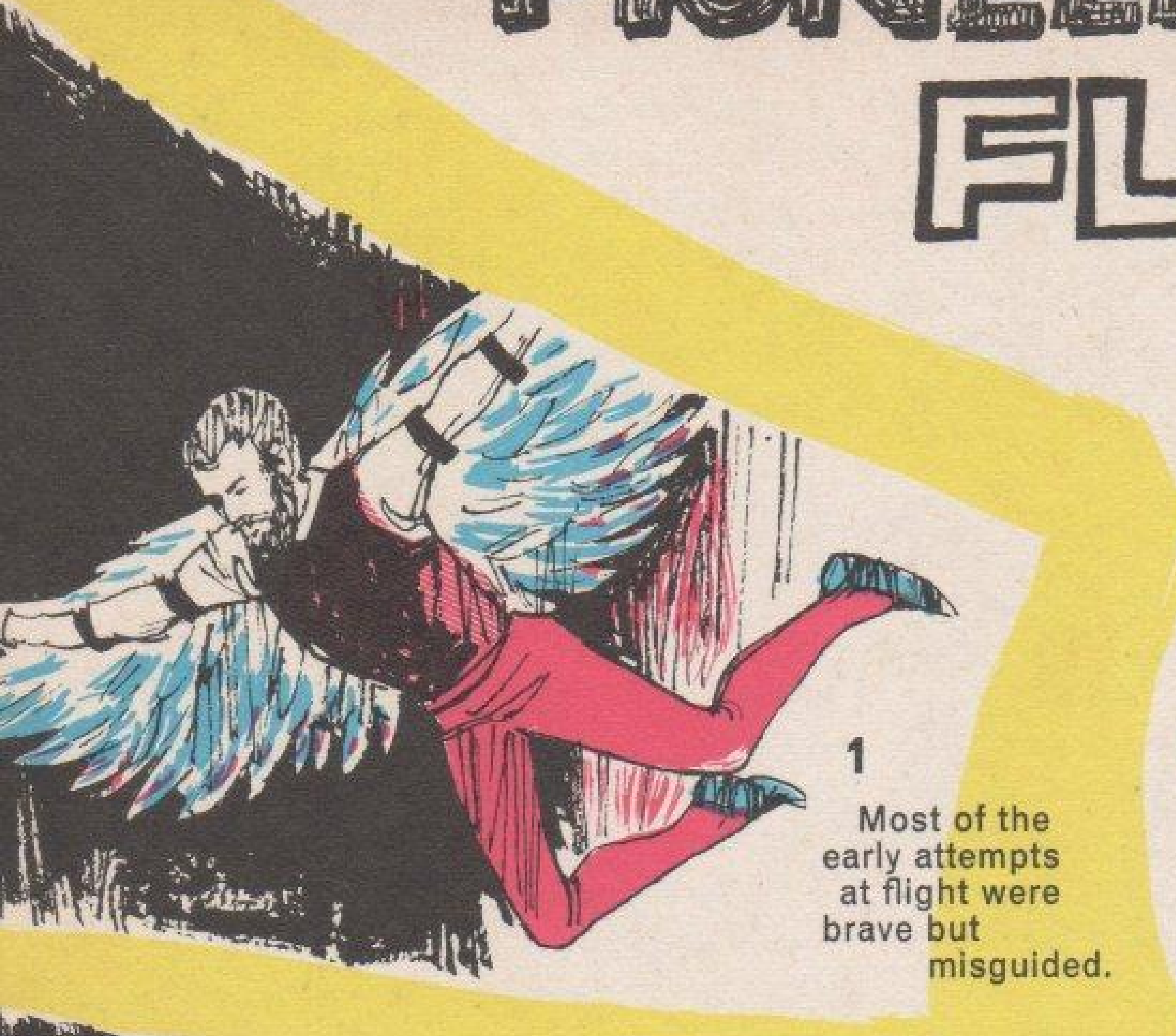


PIONEERS OF FLIGHT

SINCE THE BEGINNING OF TIME MAN HAS DREAMED OF BEING ABLE TO FLY

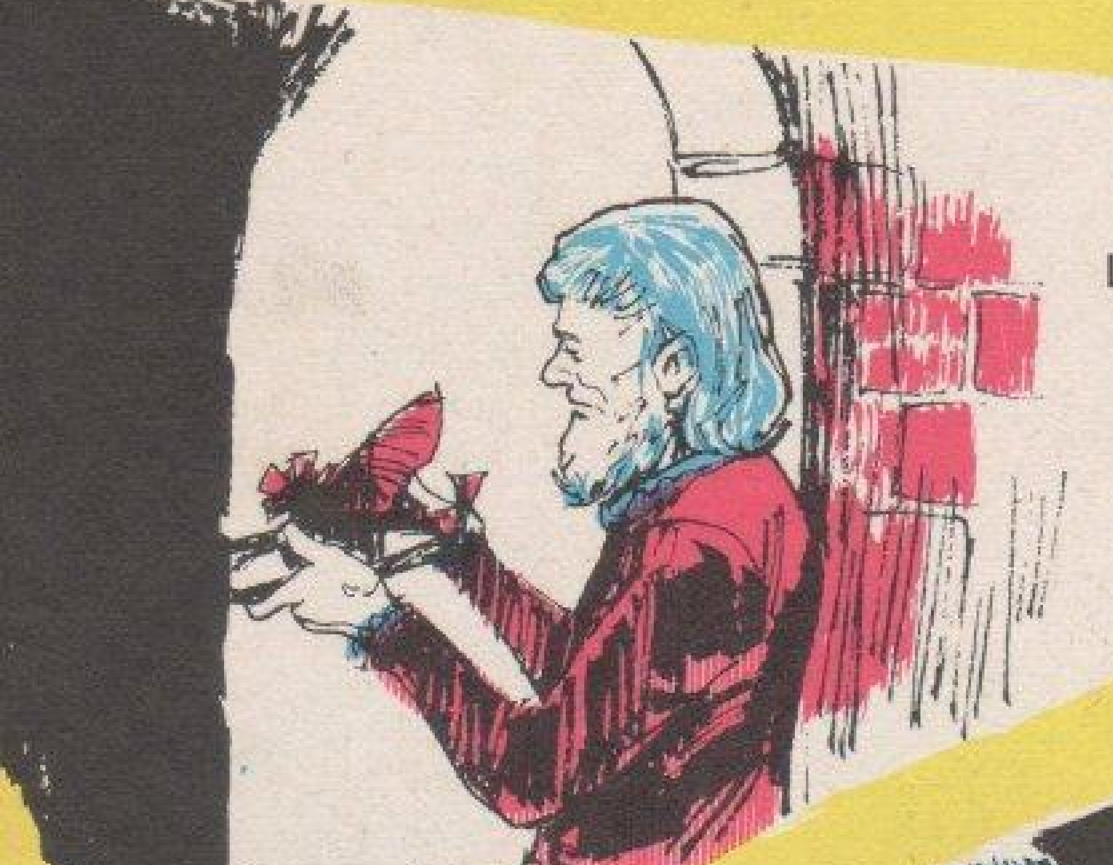






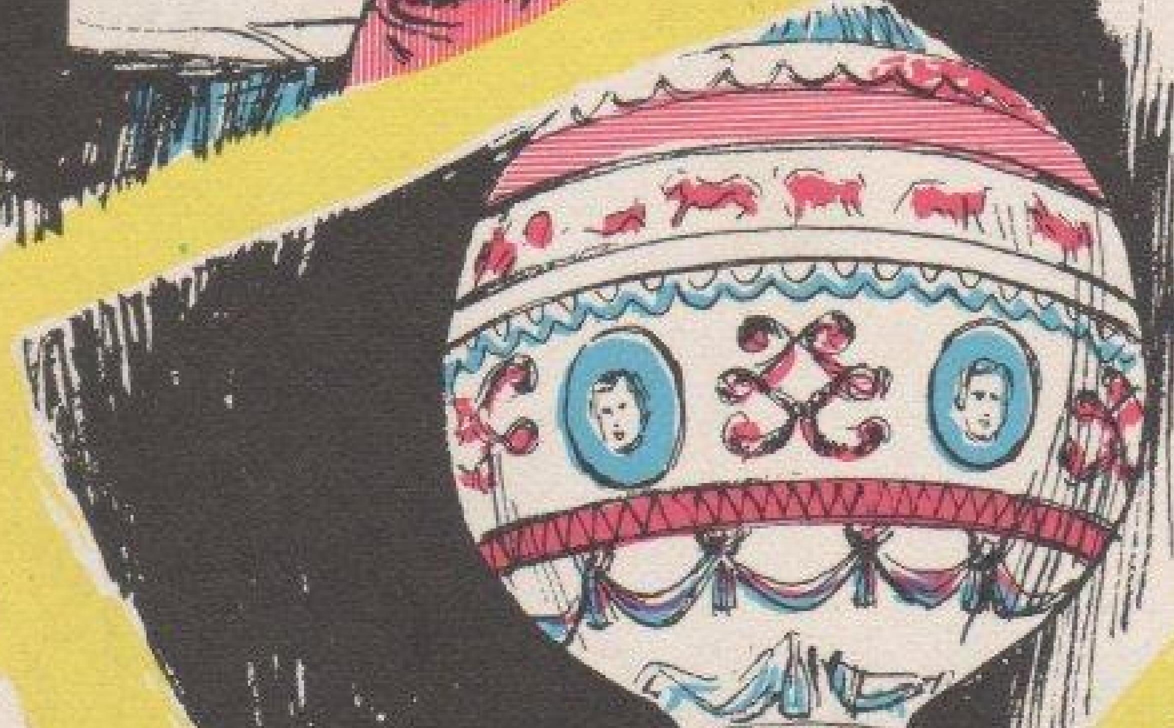
1

Most of the early attempts at flight were brave but misguided.



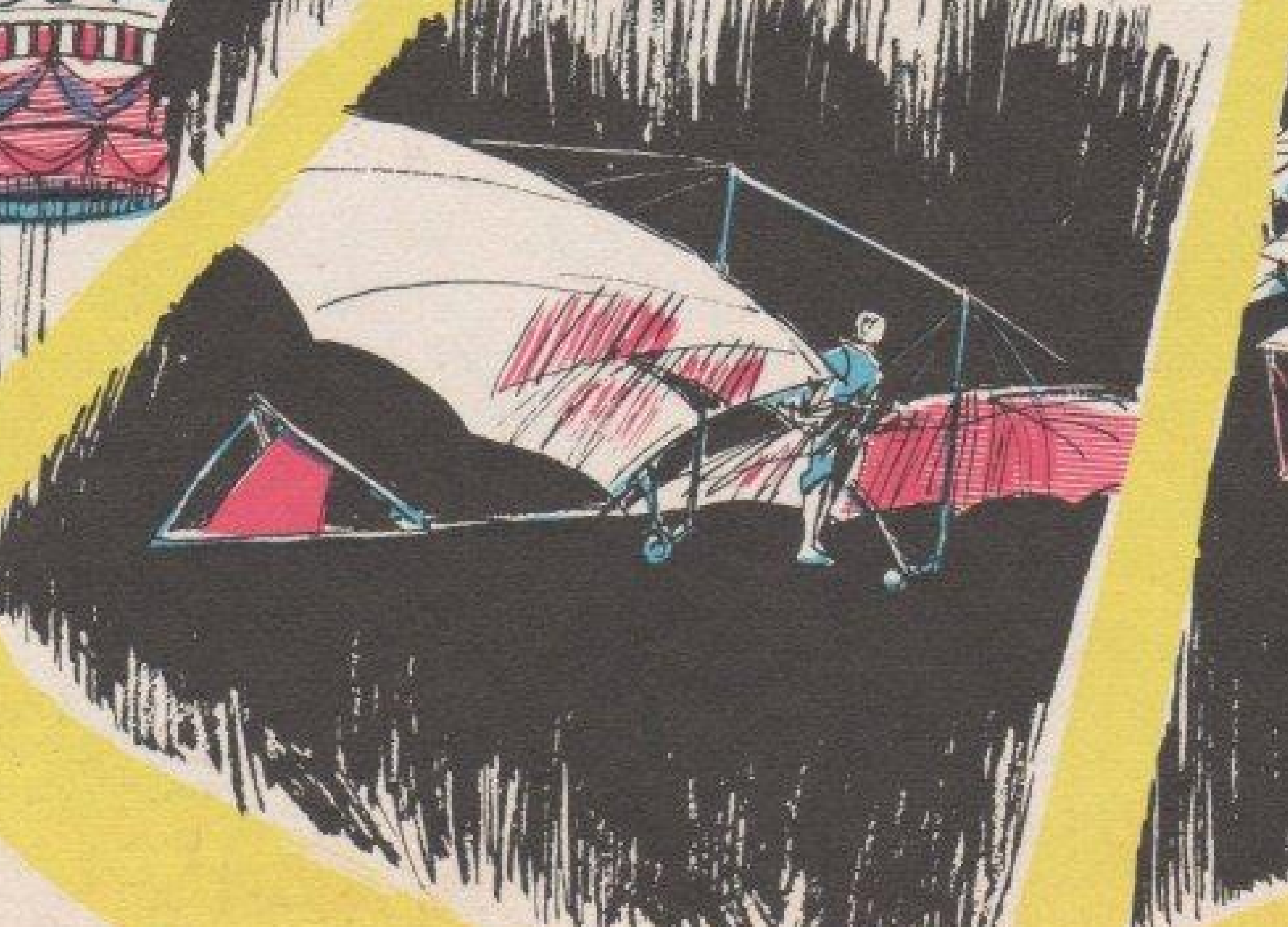
2

In the sixteenth century Leonardo da Vinci, the Italian painter and inventor, made drawings and models of flying apparatus.



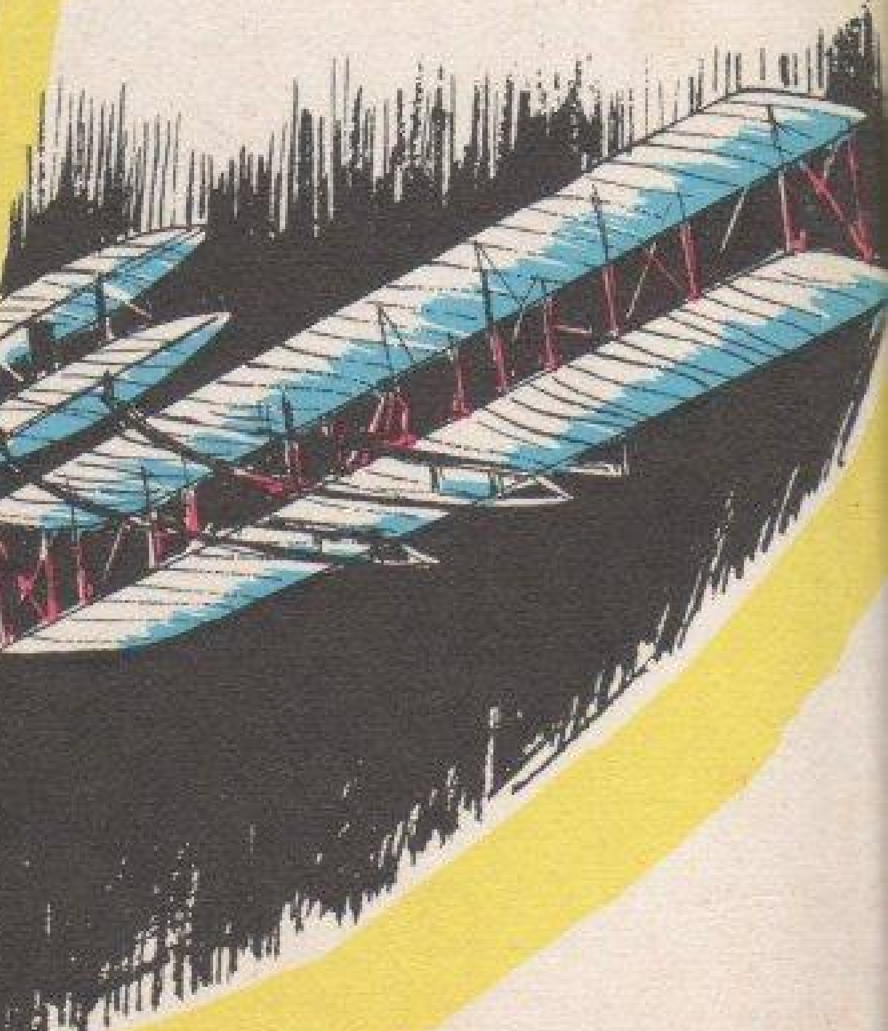
3

But it was three hundred years before man took to the air. The Montgolfier brothers of Paris made the first ascent in a hot-air balloon.



4

However balloons were cumbersome, unreliable and dangerous. Attention was once more focused on heavier-than-air machines and successful glider flights were made.

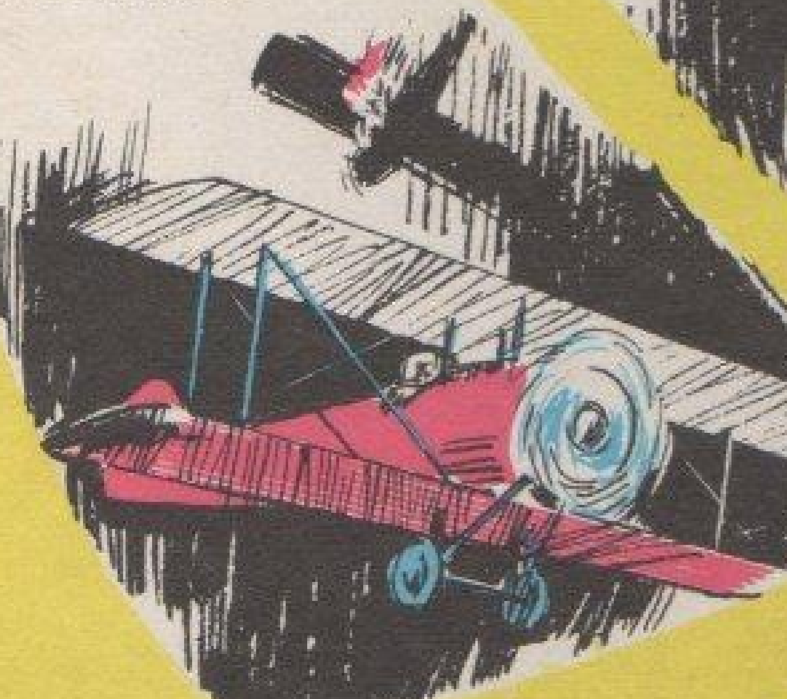


5

Adapting their own glider design and fitting it with their own lightweight engine, the two brothers Wilbur and Orville Wright made history in December 1903. Orville made the first powered flight—it lasted twelve seconds.

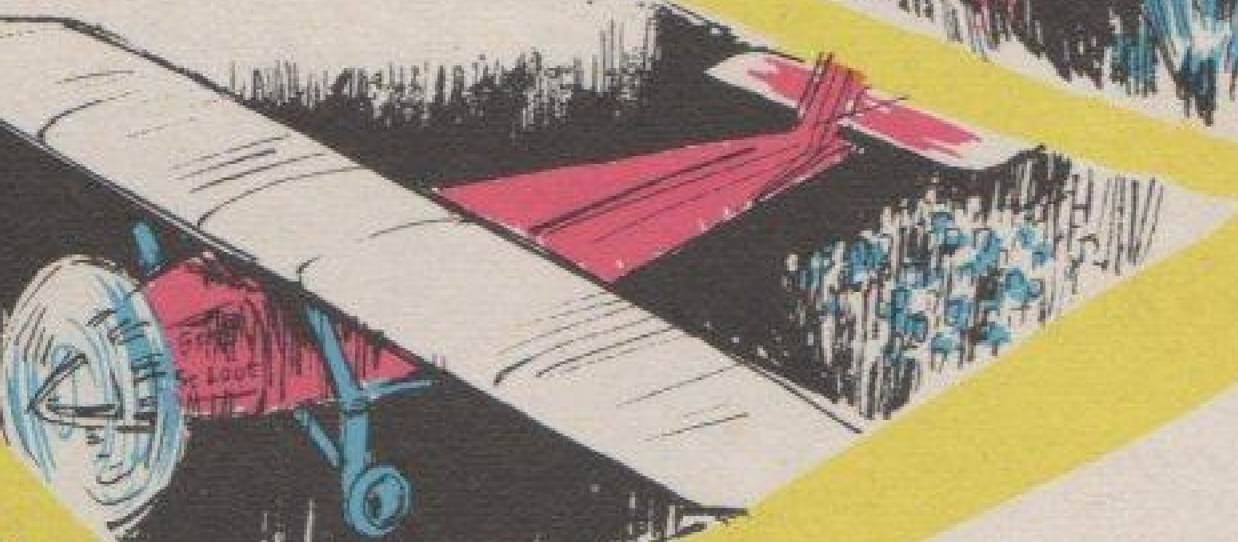
6

It was the First World War which led to new innovations in aircraft design and by 1918 amazing advances had been made.



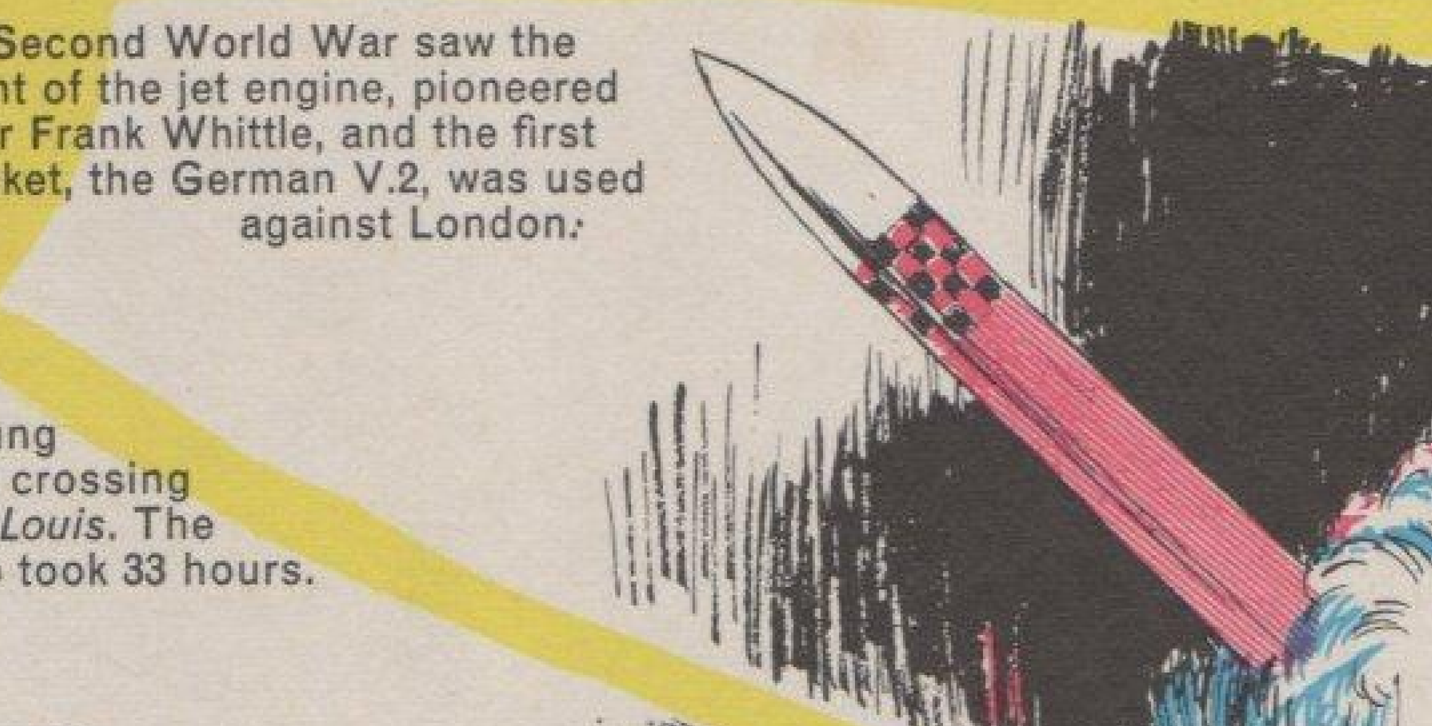
7

In 1919 Alcock and Brown, Englishmen, became the first men to fly the Atlantic non-stop. Seven years later Charles Lindbergh, a young American, made the first solo crossing in his aircraft *The Spirit of St. Louis*. The trip took 33 hours.



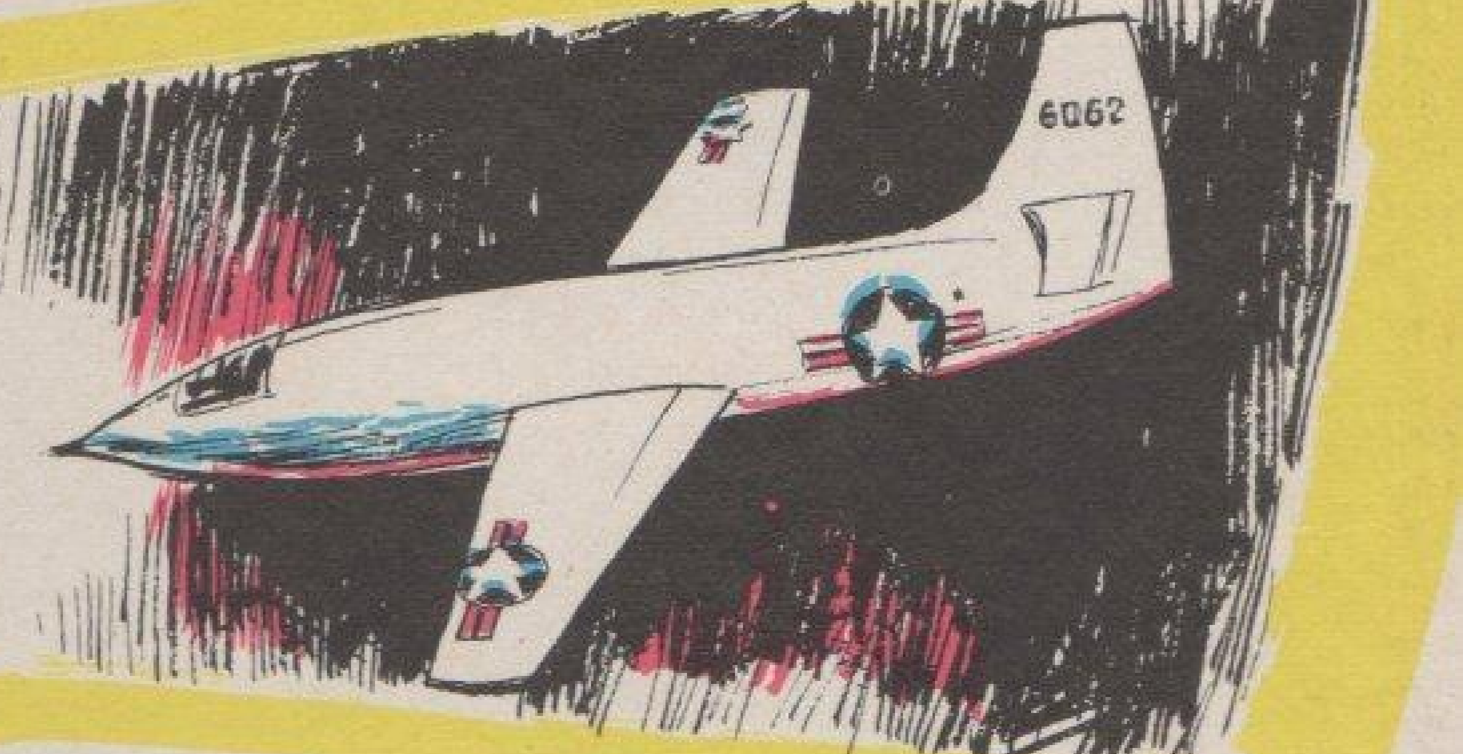
8

The Second World War saw the development of the jet engine, pioneered by Sir Frank Whittle, and the first rocket, the German V.2, was used against London.



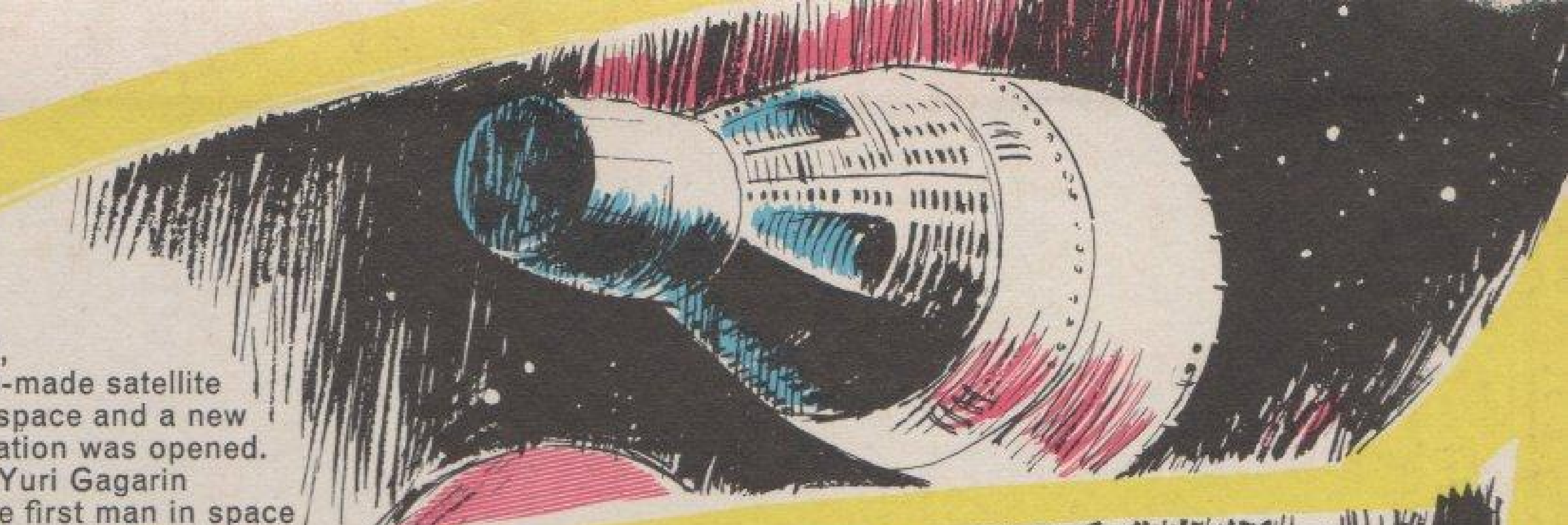
9

Jet engines were improved and in 1947 Major Charles Yeager became the first man to travel faster than sound. His specially designed Bell X-1 aircraft was released from a large bomber at a height of 30,000 feet.



10

On 4th October, 1957, the first man-made satellite was fired into space and a new dimension in aviation was opened. Four years later Major Yuri Gagarin became the first man in space when he made a single orbit of the earth.



11

Now pioneering has gone further. Rockets have been sent to the moon and Venus to send back information. It seems incredible that it is only sixty-four years since the Wright Brothers' historic flight at Kitty Hawk. Who knows what the next sixty years hold in store?